Managing Economic Development Programs in New York City:
Lessons for the Next Mayor From the Past Decade

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INTRODUCTION

Economic development in the form of more jobs and higher incomes is typically a goal of every municipal administration. The extent to which the goal is achieved depends on multiple factors, with the activities typically identified as economic development programs being only one contributor to the outcomes. While local changes in New York City's employment and wage levels will vary in response to international, national and regional forces, the ways in which municipal leaders, especially the Mayor, manage the available economic development programs can also play a significant role. This paper describes the economic development programs used in New York City and assesses the experience during the Bloomberg Administration in order to provide suggestions for further improvements by the next Mayor.

The paper is organized in four sections. The first identifies the goals of economic development policy and presents New York City's performance with respect to these goals over the period since 2000, the start of a new decade and a year before the start of a new mayoral administration. The trend has been notable improvement in most indicators, and the second section considers the factors that help explain the gains. Included among the factors are national developments and local contextual forces that affect the quality of life in the city and its attractiveness; economic development programs and the ways they are intended to improve performance are identified separately. The third section assesses the ways in which the Bloomberg Administration has implemented the available economic development programs, pointing out strengths and weaknesses, since its first budget in fiscal year 2002. The last section presents recommendations that build upon the record of the past to improve future performance.

ECONOMIC DEVELOPMENT GOALS AND PERFORMANCE

New York City's leaders generally pursue four economic development goals:

1. Promote growth in the number of jobs and scale of economic activity;
2. Enhance residents' access to "quality" jobs providing adequate wages and benefits;[1]
3. Diversify local economic activity to reduce dependence on selected industries and geographic concentration of jobs in a single area;[2] and
4. Maintain the city's position as the core of a globally competitive regional economy.[3]

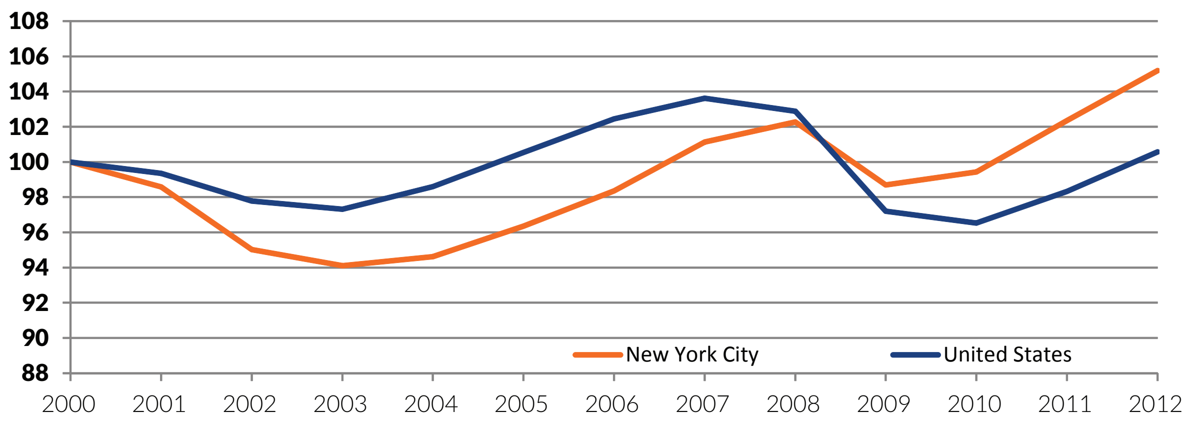
How well has New York City done on each of these criteria?

Economic Growth

Economic growth can be measured by three key indicators: employment, aggregate wages, and Gross City Product (GCP). Employment indicates the number of opportunities for gainful work. Aggregate wages quantify the earnings generated by employment; comparisons of job and wage growth can reveal how adequately jobs are generating income for the employed. GCP is an indicator of the output produced locally, and reflects the productivity of local activity.

In the period from 2000 to 2012, New York City outperformed the nation in terms of job growth. (See Figure 1.) The local economy was more severely impacted by the 2001 recession than the nation as a whole and continued to lag in terms of private employment growth until the onset of the Great Recession in 2008. Since then employment in New York City declined more slowly than in the nation as a whole and then revived more quickly and more robustly than the nation. In 2012 national

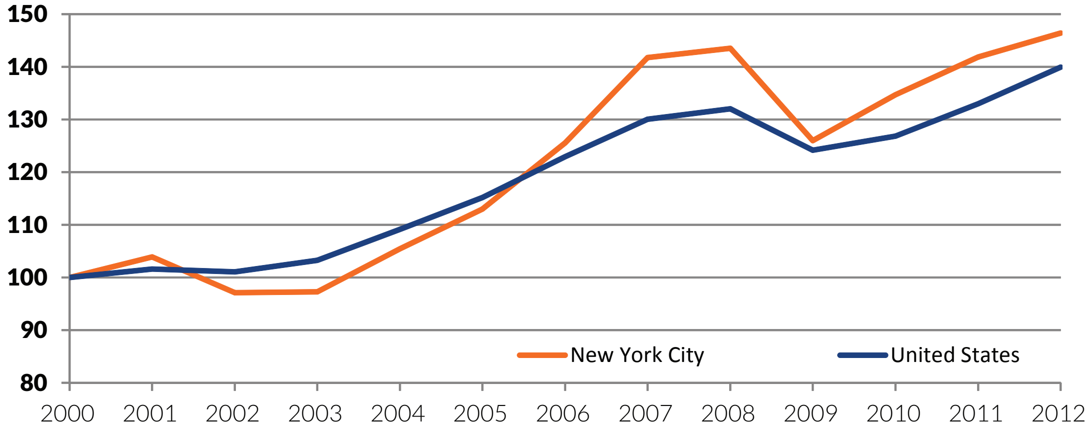
Figure 1: Index of Average Annual Private Employment, New York City and United States, 2000-2012



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Wages, 2000-2012.

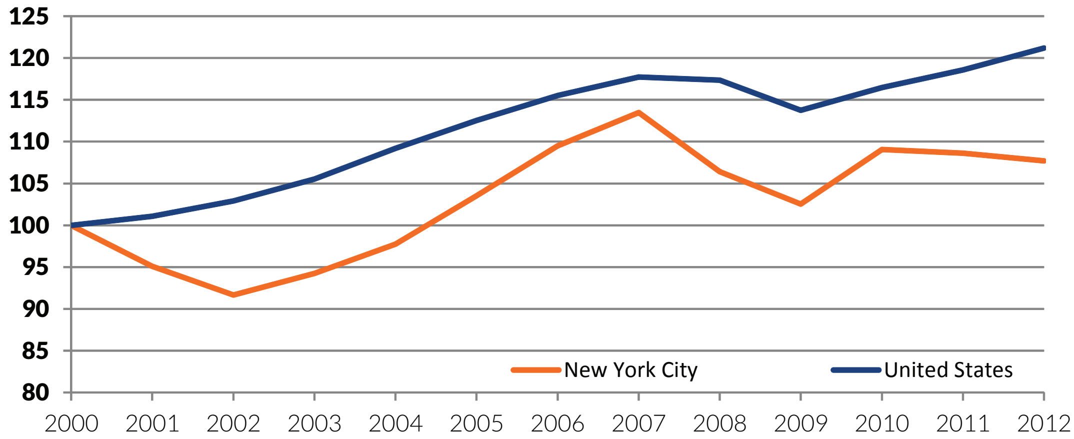
employment barely exceeded its 2000 level, while in New York City employment was about 5 percent greater than in 2000 for a net gain of 158,664 jobs. The local gain from the trough of the recession in 2003 was 339,019 jobs.

Figure 2: Index of Aggregate Private Sector Wages, New York City and United States, 2000-2012



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Wages, 2000-2012.

Figure 3: Index of Real Gross Product, New York City and United States, 2000-2012



Source: NYC Office of Management and Budget, Monthly Report on Economic Conditions, July 2013.

Aggregate private sector wages followed a somewhat different path, but also had a net gain above the national average. (See Figure 2.) Wage gains in the city outpaced those nationally in the years just before the 2008 crash; although the subsequent local drop was quite sharp, New York City's wages have rebounded more briskly than the nation's and are 46 percent above 2000 levels compared to a 40 percent gain nationally. Adjusted for inflation the New York City gain from 2000 is 9.8 percent.[4]

A different picture emerges from the data on economic output. (See Figure 3.) Growth in Real Gross City Product (RGCP) lagged that of national Real Gross Domestic Product (RGDP) throughout the period since 2000. In 2012 RGCP was about 8 percent above the 2000 level; in contrast, the national RGDP was more than 21 percent above the 2000 level. New York City's relatively weak performance in output growth reflects its slower growth in productivity, indicating a shift toward a lower value-added industry mix and/or declining productivity within the city's major industries.

Access to Quality Employment

How "good" are the new jobs created in the New York City economy? Table 1 identifies the nine industry sectors which had employment growth over the 2000 to 2012 period. Together they added nearly 375,000 jobs. More than half that total, nearly 206,000 jobs, were accounted for by just two sectors – health care and social assistance, and accommodation and food services.

The most notable point about City job growth is that it was concentrated in relatively low wage sectors. Four of the nine sectors, including the three largest growth industries, have average wages below the national average; these relatively low wage sectors account for more than seven of every ten new jobs. The two exceptionally high-paying sectors, professional, scientific and technical services and management of companies, represented only about one of every ten new jobs.

Table 1. Employment and Average Wage Change in Selected New York City Industry Sectors, 2000-2012

Industry Sector	Employment Change	2012 Average Wage	Average Wage Change
Health Care and Social Assistance	114,461	$48,083	38%
Accommodation and Food Services	91,124	29,774	27%
Retail Trade	48,950	36,538	32%
Educational Services	45,824	55,810	58%
Professional, Scientific and Technical Services	25,941	115,302	44%
Other Services	17,530	43,108	48%
Arts, Entertainment and Recreation	17,189	64,011	29%
Management of Companies	12,534	191,671	35%
Real Estate, Rental and Leasing	1,125	66,702	50%
Total*	**374,678**	**$60,738**	**37%**
Private Employment - National		$49,200	39%

*Total is limited to sectors in the table; does not reflect citywide figures.

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Wages, 2000-2012.

A second important aspect of job growth is the extent to which New York City residents, as opposed to commuters, fill them. The available data on this issue are limited to survey responses beginning in 2002 that may not be highly reliable and include self-employment as well as the private payroll employment reported in the previous table and figures. (See Table 2.) These data suggest residents benefited significantly from economic growth; from 2002 to 2011 the number of employed New York City residents increased by nearly 265,000, with a nearly steady proportion of residents (about 84 percent) working within the city during the period. Considered from the perspective of the share of jobs in the city filled by residents, the proportion declined modestly from under 74 percent to under 72 percent. This suggests some more favorable access to new jobs among commuters, with the number of jobs "lost" to commuters by residents due to the proportional shift of less than 65,000 of a total of more than 3.2 million.

Table 2. Private Employment by Employee Residence, 2002-2011

	Private Employment in New York City		Private Employment of New York City Residents	
Year	Number	Resident's Share	Number	Employed in New York City
2002	2,890,129	73.5%	2,526,227	84.1%
2003	2,842,769	73.6%	2,497,199	83.8%
2004	2,863,590	73.5%	2,515,170	83.7%
2005	2,918,245	73.6%	2,561,692	83.8%
2006	2,968,249	73.8%	2,621,375	83.6%
2007	3,014,100	72.7%	2,612,720	83.8%
2008	3,103,968	73.1%	2,720,175	83.5%
2009	3,103,622	71.8%	2,228,453	83.2%
2010	3,147,409	71.8%	2,716,702	83.2%
2011	3,246,915	71.7%	2,791,151	83.4%

Note: Data is not available prior to 2002.

Source: U.S. Census Bureau, OnTheMap Tool, http://onthemap.ces.census.gov/.

How has economic growth affected the income levels of New York City residents? At the lower end of the income distribution New York City is bucking a national trend toward greater poverty, but still has a greater percentage of low-income households than is the case nationwide. Based on the national poverty threshold for families, which is adjusted for cost of living and family size, 18.2 percent of all families and 26 percent of families with children were living in poverty in New York City in 2012; these figures are essentially flat from 18.5 and 25.8 percent, respectively, in 2000. In contrast, national poverty rates in 2012 were 11.8 and 18.8 percent for all families and families with children, respectively, up from 9.2 and 13.6 percent in 2000.[5]

At the middle of the income distribution, median household income in New York City, adjusted for inflation, has followed a national pattern of decline since 2000. Measured in constant 2012 dollars, the city's median annual income fell from $51,057 to $50,895 over the period. However this decline was less than for the nation, 0.3 percent versus 8.3 percent. While New York City's median income still lagged that of the nation in 2012 ($50,895 versus $51,371), the gap was narrower than in 2000 ($51,057 versus $55,992).[6]

Considering the overall income distribution, New York remains a city with a larger share of households at the low and high ends than is the case for the nation. (See Table 3.) In 2012 about 28 percent of local households had annual incomes below $25,000 compared to 24 percent nationally; the share with incomes above $150,000 was about 12 percent locally and 9 percent nationally. This general pattern changed little since 2000.

Table 3: Households by Annual Income, New York City and United States, 2000 and 2012
(percent distribution)

	2000		2012	
Income	**New York City**	**USA**	**New York City**	**USA**
Less than $15,000	19.3%	15.8%	17.4%	13.3%
$15,000 to $24,999	11.7%	12.8%	11.0%	11.1%
$25,000 to $34,999	11.6%	12.8%	9.0%	10.4%
$35,000 to $49,999	14.4%	16.5%	11.7%	13.8%
$50,000 to $74,999	17.5%	19.5%	16.1%	18.0%
$75,000 to $99,999	10.2%	10.2%	10.7%	11.9%
$100,000 to $149,999	8.8%	7.7%	12.2%	12.4%
$150,000 to $199,999	2.7%	2.2%	5.2%	4.6%
$200,000 and above	3.8%	2.4%	6.6%	4.6%

Source: U.S. Census Bureau, Decennial Census, 2000 and American Community Survey, 2012, http://factfinder2.census.gov/.

Table 4. New York City Private Employment and Private Aggregate Wages by Industry, 2000 and 2012
(Percent Distribution)

	Employment		Aggregate Wages	
Industry Sector	**2000**	**2012**	**2000**	**2012**
Professional, Business and Technical Services	20%	18%	21%	23%
Trade, Transportation and Utilities	17%	18%	12%	11%
Education and Health Services	17%	23%	11%	14%
Financial Activities	17%	13%	35%	34%
Leisure and Hospitality	9%	11%	4%	5%
Information	7%	5%	8%	7%
Manufacturing	5%	2%	3%	2%
Other Services	4%	5%	3%	2%
Construction	4%	3%	3%	3%

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Wages, 2000-2012. Manufacturing figures for 2000 include extrapolated figures for Queens County in that year, based on Queens County disclosed ratio of manufacturing to goods producing employment in 2001. Sector totals may not add to 100 percent due to rounding.

Industrial and Geographic Diversification

Two goals of economic development policy have been to reduce the city's concentration of economic activity in the financial services sector and to spread economic activity more evenly between Manhattan and other areas of the city. With respect to industry mix, the city's dependence on financial services has lessened, but this is more strongly the case for employment than wages. (See Table 4.) That sector's share of total private employment fell from 17 percent to 13 percent between 2000 and 2012, but the change in share of aggregate private wages was a more modest 35 percent to 34 percent. For professional and business services, often related to the financial sector, the employment share dropped from 20 percent to 18 percent, but the wage share increased from 21 percent to 23 percent.

The major sectors with growing shares of economic activity were education and health services and leisure and hospitality. The education and health sector employment rose from 17 percent to 23 percent of the private total, and its wages from 11 percent to 14 percent. The hospitality and leisure industries grew from 9 percent to 11 percent of private employment and 4 percent to 5 percent of wages.

Some progress has also been made in decentralizing economic activity from Manhattan. (See Table 5.) Its share of total private employment declined from 63 percent to 60 percent between 2000 and 2012, but its share of private sector wages declined more slowly, by just one percentage point, to 80 percent in 2012. The most substantial gains were in Brooklyn; its share of employment rose from 13 percent to 15 percent, and its share of wages rose by one percentage point to 7 percent. The share of activity in the other boroughs changed little.

Table 5: New York City Private Employment and Private Aggregate Wages by Borough, 2000 and 2012
(Percent Distribution)

	Employment		Aggregate Wages	
Borough	**2000**	**2012**	**2000**	**2012**
Manhattan	63%	60%	81%	80%
Queens	15%	15%	8%	8%
Brooklyn	13%	15%	6%	7%
Bronx	6%	7%	3%	3%
Staten Island	3%	3%	1%	1%

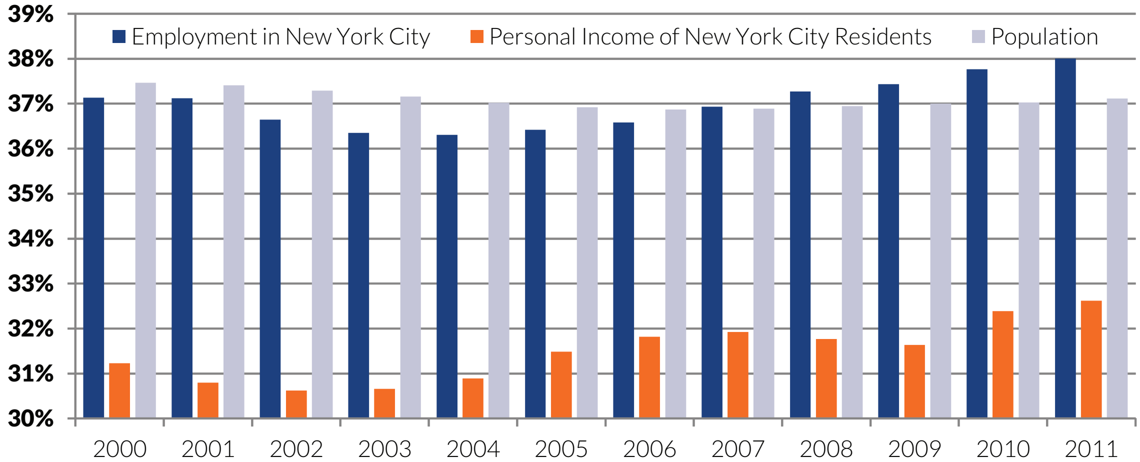
Source: U.S. Bureau of Labor Statistics, Quarterly Census of Wages, 2000 and 2012, ftp://ftp.bls.gov/pub/special.requests/cew/.

Regional Leadership

More than half a century of suburbanization of population and employment in the United States has made it a challenge for central cities to retain a position of economic leadership within their metropolitan region. For New York City, the principal city in a 35-county region of 22.4 million people spanning four states,[7] the threat of decentralization has been serious. Competition has arisen not just for population from suburban residential settings but also for high-paying jobs in key sectors such as finance from subcenters on the New Jersey shore of the Hudson River and in Stamford, Connecticut.

Despite these threats, since 2000 New York City has strengthened its role as the economic center of the region. Although its regional population share dipped slightly during the 2005 to 2007 period and was almost identical in 2011 and in 2000 (37.1 percent versus 37.5 percent), the city's share of regional employment and income rose over that period. (See Figure 4.) Despite a slip in the city's economic role after the terrorist attacks on Downtown Manhattan in 2001 and after the fiscal crisis of 2008, its net gain over the period is from 37.1 percent to 38 percent of employment and 31.2 percent to 32.6 percent of personal income.

Figure 4: New York City Share of Regional Employment, Personal Income and Population, 2000-2011



Source: U.S. Bureau of Economic Analysis, Regional Data: GDP & Personal Income, 2000-2011, http://www.bea.gov/iTable/index_regional.cfm.

As with population, the city's share of regional households by income was nearly the same in 2012 as in 2000. (See Table 6.) The city retained a stable share of the highest income households (above $200,000 annually), a group whose number nearly doubled over the period. At the lower end of the income distribution, the city's share of households declined, and its share among the middle income groups increased.

Table 6: New York City Share of Regional Households by Income, 2000 and 2012

Income	2000	2012
$0 to $14,999	56.5%	53.8%
$15,000 to $24,999	45.0%	46.2%
$25,000 to $34,999	43.3%	41.5%
$35,000 to $49,999	39.4%	40.4%
$50,000 to $74,999	34.5%	38.2%
$75,000 to $99,999	29.0%	33.9%
$100,000 to $199,999	25.5%	28.9%
$200,000 and greater	28.2%	28.0%
Total	38.2%	37.8%

Source: U.S. Census Bureau, 2000 Decennial Census and American Community Survey, 2012 1-year estimates, http://factfinder2.census.gov/. Data is based on aggregated income levels for all "Central" counties in the New York-Newark, NY-NJ-CT-PA Combined Statistical Area, 2013 Delineation available at http://www.census.gov/population/metro/data/def.html.

WHAT FACTORS ARE DRIVING PERFORMANCE?

As the previous discussion makes clear, national forces play a large role in determining the city's economic fate. But New York City has bucked national trends and outperformed the rest of the nation on many key indicators. What explains the city's enhanced competitiveness and more positive performance?

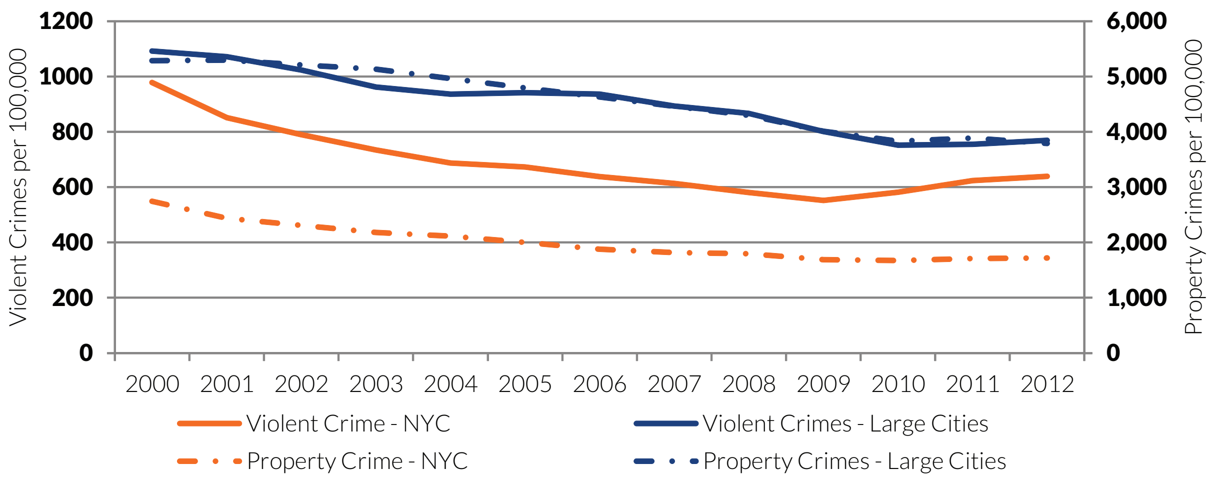
In answering this question it is important to distinguish between the role of those activities identified as economic development programs and the many other dimensions of municipal policy that strongly affect the city's competitiveness for people and jobs. Before describing New York City's distinct economic development programs, it is important to recognize the role of the multiple other more contextual factors at work over the past decade.

Trends in Important Contextual Factors

Multiple factors influence the location decisions of people and firms. The list of relevant considerations can be extensive, including climate, air quality, amenities such as parks and restaurants, and the range of cultural institutions. However, four factors are often identified as particularly important and provide a useful context for assessing local economic development activities – degree of public safety, quality of public schools, the inflow of new workers and local tax policy. A brief picture of the impact of these factors since 2000 indicates improvement in three of the four factors, while tax policy has tended to create a less attractive environment.[8]

Public Safety. In the 1990s crime rates fell dramatically nationwide and even more so in New York City, reversing the city's reputation from one of a highly dangerous place to the "nation's safest big city." Since 2000 this reputation has held steady and local crime rates have generally continued to fall.

Figure 5: Violent and Property Crime Rates, New York City and Large U.S. Cities, 2000-2012



Source: Federal Bureau of Investigation, *Crime in the United States*, 2000-2012 editions. Large cities defined as having a population of 250,000 or greater.

For property crimes, the rate in New York City has gone down continually falling, from 2,745 per 100,000 people in 2000 to 1,722 in 2012. National property crime rates also fell, but in 2012 the New York City rate was 54 percent below that for all large cities. (See Figure 5.) The violent crime rate in New York City fell from 978 per 100,000 people in 2000 to 552 in 2009, and then rose to 639 in 2012. However, the violent crime rate in New York was still nearly 17 percent lower than for all large cities in 2012.

Public Schools. Early in his tenure, Mayor Bloomberg made school reform a signature issue for his administration. The Mayor argued that better results were possible if the schools were transferred from governance by a Board with few mayoral appointees to a system of direct mayoral control; these results would be achieved through greater accountability, innovation, and continual evaluation. The Governor and state legislature approved the shift to Mayoral control within the first year of the new administration.

The new system has shown improvement on two of the most frequently used indicators of school quality – standardized tests and high school graduation rates. Given the controversy around City and State standardized test practices, the most reliable such evidence are results of the National Assessment of Education Progress (NAEP) tests from the National Center for Education Statistics. Testing has been done every two years starting at the fourth and eighth grades for reading since 2002 and for math since 2003. For reading between 2002 and 2011 the percentage of students reaching a basic achievement level in fourth grade rose from 47 to 61; in eighth grade the change was from 61 to 65. For math the percentage gains in the 2003 to 2011 period were from 67 to 76 in fourth grade and from 54 to 59 in eighth grade. In each case there was some fluctuation in the gains during the interim years, but the overall change was positive. Moreover, in the latest years, New York City's scores were better than those in Los Angeles, Chicago, Houston and Philadelphia for reading, and better than Los Angeles and Philadelphia in math.[9]

The measurement of high school graduation rates is controversial with the City and State using different methods, but all available indicators show progress. According to the City's calculations the rate rose from 50 percent in 2000 to 71 percent in 2012; according to the State the increase was from 47 percent in 2005 to 65 percent in 2012.[10]

In-migration and Labor Supply. Vibrant cities depend on a dynamic flow of people in and out of their suburbs and other metropolitan areas in the United States as well as foreign nations. In the past decade New York City has benefited from a strong net inflow of people from other nations and has seen its outflow to other parts of the United States slow.

As shown in Table 7, New York City benefits from a significant net international in-migration. While the pace of this in-migration has fallen in the years since the terrorist attacks in 2001 and accompanying national policy changes, the city still benefits from a net inflow in the range of 50,000 to 100,000 people annually. During the same period the rate of domestic net out-migration has slowed; in recent years the city has lost about half the number of people to other parts of the country than it did in earlier years. Combined with natural increases (the annual excess of births over deaths), the net in-migration has led to substantial population and labor force growth in New York City.

Tax Policy. High tax burdens are widely regarded as a deterrent to economic growth, and New York City has long suffered from its standing as a high tax location. A 2000 Independent Budget Office (IBO) study using 1997 data found that New York City had the highest tax burden among 10 large U.S. cities, with its local taxes taking $7.99 out of every $100 in taxable resources, a burden about 18 percent greater than in second place Philadelphia.[11] An update of the study using 2004 data found New York City's local taxes still to be the highest and still well above second place Philadelphia. For

Table 7: Components of Population Change, New York City, 2001-2012

Year	Natural Growth	Domestic Net Migration	International Net Migration	Annual Population Change
2001	63,505	(132,723)	111,360	42,142
2002	61,249	(152,278)	111,349	20,320
2003	59,273	(151,370)	104,300	12,203
2004	64,623	(168,504)	99,120	(4,761)
2005	63,753	(165,873)	83,030	(19,090)
2006	60,317	(153,828)	94,766	1,255
2007	62,623	(76,018)	72,850	59,455
2008	60,229	(119,956)	86,318	26,591
2009	61,541	(77,381)	57,674	41,834
2010	82,179	(82,208)	102,991	102,962
2011	67,108	(56,982)	48,440	58,566
2012	63,654	(65,760)	69,422	67,316

Notes: Annual figure based on July 1 of the year prior through July 1 of the year noted. For example, 2001 is the change over the period from July 1, 2000 to June 30, 2001. 2010 figures include overlap with 2009 data from April 1 through July 1 of 2010 due to limitations of U.S. Census Component of Population Change Estimates.

Source: U.S. Census Bureau, Population Estimates, 2001 through 2012, http://www.census.gov/popest/data/historical/index.html.

2004, the same pattern was found for combined state and local taxes in each city.[12]

Most tax changes since 2000 at the state and municipal level have increased the tax burden. Both the state and city increased their personal income tax rates in response to the 2001 recession for a period spanning 2003 to 2005, and the state again raised its rates after the 2008 downturn and then extended the higher rates to 2017. The state also imposed a new payroll tax on most employers in the downstate region including New York City in 2009 to support mass transit services, and in 2009 the City raised its sales tax by 0.5 percentage points. The City's biggest tax increase was an 18 percent increase in the average property tax rate in 2003; that rate was lowered 7 percent in 2008, but raised back again in 2009. Positive tax developments were limited to 2009 state and local changes in the way corporate income is allocated that generally lowered businesses' burden, and to the lowering of New York City's Unincorporated Business Tax for most small businesses.

Economic Development Agencies and Tools

Within the context of these broader factors, specific government agencies with authority to administer specific economic development programs seek to attract jobs and investment to New York City. As a prelude to assessing how well the programs work, it is useful to describe their organizational structure and the nature of economic development programs or tools available.

Organizational Structure. Multiple state and local agencies are engaged in economic development activities, creating a fragmented organizational structure. A first important distinction to make is between agencies created and governed by the State of New York and those authorized by the City of New York. Both types operate in New York City.

State agencies. New York State economic development programs operate statewide and include significant activity in New York City. In 2012 New York State spent approximately $880 million on economic development in the city.[13] The State's flagship vehicle for economic development is Empire State Development (ESD), the name given to the combined operations of the New York State Department of Economic Development, a line agency of state government, and the Empire State Development Corporation (ESDC), a public benefit corporation created under state law and governed by a board accountable to the governor. ESD often operates in New York City through subsidiary corporations of the ESDC. These subsidiaries are dedicated to specific projects or areas for which they provide financing and project management. Examples include subsidiaries for Atlantic Yards, the Jacob Javits Convention Center, Moynihan Station, the Lower Manhattan Development Corporation, Queens West Development Corporation, and the Harlem Community Development Corporation.

In addition to ESD the state has four public authorities, a part of whose activities include economic development programs in New York City. These are the Port Authority of New York and New Jersey which is rebuilding its the World Trade Center in Lower Manhattan; the Battery Park City Authority, which also engages in real estate development in Lower Manhattan; the New York Power Authority, which gives energy subsidies to firms and nonprofit organizations in the city; and the New York State Energy and Research Development Authority, which gives subsidies to businesses throughout the state for projects related to energy conservation.

The state's economic development activities are important for the future of New York City, and the Mayor should work constructively with state officials. Several state programs have been studied separately by the Citizens Budget Commission, and opportunities exist for improving them.[14] However, the state programs are not included in the scope of this paper.

Municipal agencies. New York City operates its economic development programs through a mix of direct municipal agencies, a distinct not-for-profit organization called the New York City Economic Development Corporation (EDC), quasi-independent local development corporations (LDCs), and a local authority called the Industrial Development Agency (IDA). The typical practice of mayors is to appoint a Deputy Mayor for Economic Development to coordinate the activities of the multiple agencies.

The municipal departments involved in economic development are Small Business Services (SBS) and Finance. In addition the New York City Housing Authority has the ability to offer tax exemptions for commercial property it owns. Other agencies, notably the Human Resources Administration, Youth and Community Development, the Department of Education, the Department for the Aging, Department of Parks and Recreation, and the City University of New York, offer training programs relevant to workforce development; however, these activities are excluded from this analysis because their goals overlap with objectives related to reducing welfare support, promoting basic literacy, education and community service.

SBS is the largest of these departments in terms of expenditures for economic development. Its primary tasks include oversight of workforce employment service centers, liaising with Business Improvement Districts, business planning and entrepreneurial help.[15]

In contrast to SBS, other departments undertake economic development efforts as only part of their mission. The Department of Finance is mainly responsible for collecting taxes and other revenues, but it also administers tax exemption programs aimed at adding businesses.

It also is important to note the role of the City Planning Commission (CPC).[16] Through staff in its Department of City Planning, the CPC on develops proposals for changes in the City's zoning code, which must be approved by the City Council in order to become effective. The CPC also contributes to planning for infrastructure investment critical to economic development.

Economic Development Corporation. EDC is a non-profit organization with a 27-member board. Six are appointed directly by the Mayor, 11 are appointed by the Mayor after nomination by other officials, and 10 appointed by the Chairperson, who is designated by the Mayor. It is subject to mayoral control through his appointments to the board and the EDC's dependence on contracting with municipal agencies for much of its funding. EDC operates under a master contract with SBS, with municipal funds allocated to SBS and then awarded to EDC via contracts.[17] Contracted funds are made available for implementation of capital projects for city agencies. In addition EDC provides loans and grants to support specific projects and undertakes programmatic activity to bolster targeted industries and entrepreneurial activity. EDC also manages real estate owned by the City of New York and has a real estate management subsidiary, Apple Industrial Development Corporation. Funds for programmatic activity come from revenue from EDC's capital management and real estate development and management proceeds. EDC is considered the lead organization for the City's economic development programs.

EDC administers the programs offered through the IDA and Build NYC, separate legal entities authorized to issue tax-exempt bonds on behalf of private firms and nonprofit organizations in the city. The IDA can also grant certain state and local tax exemptions to private firms. The IDA can own property, which is exempt from real estate taxes, and convey a part of the benefits of that tax exemption to private tenants through arrangements known as "payments in lieu of taxes" (PILOTs). The IDA and Build NYC are governed by a separate board from EDC, with representatives of the Comptroller and Borough Presidents, but the Mayor maintains substantial control of these entities.

Local development corporations. Local development corporations (LDCs) are a distinct category of non-profit organizations authorized by state law and created by local jurisdictions. In New York City, the mayor has come to rely heavily on LDCs to implement economic development strategies.

LDCs have been created to take on specific economic development projects. The major ones are Coney Island Development Corporation, Brooklyn Bridge Park Corporation, Governor's Island Development Corporation, Brooklyn Navy Yard Development Corporation, and Hudson Yards Development Corporation. Although legally distinct nonprofit entities, these organizations serve as instruments for municipal policy because their boards are appointed by public officials and they rely on public funding. These entities may be empowered to issue tax-exempt debt, and in some cases the property they own or control is exempt from property tax and can be leased under favorable terms. In addition, the Trust for Cultural Resources of the City of New York is an LDC that issues tax exempt bonds on behalf of 21 cultural institutions in the city. The Land Development Corporation is an LDC established in 2012 to lease and sell certain City properties previously overseen by EDC.

Tools for Economic Development. As the previous discussion indicates, the multiple economic development agencies have varying missions, but they also vary in the authority they are granted to award a variety of benefits or subsidies. This section explains more fully the nature of the five basic tools available to economic development organizations - Tax Expenditures, Capital Spending, Conduit Financing, Program Operations, and Zoning.

Tax Expenditures. Tax expenditures are the revenues a government foregoes by giving tax exemptions or other favorable tax treatment to specified organizations or for specified purposes. At the local government level tax expenditures are given for economic development through the real property tax, sales tax, mortgage recording tax and business income taxes. The tax benefits may be awarded "as-of-right," meaning firms qualify by meeting certain predetermined qualifications usually set in law, or they may be "discretionary," meaning a firm must apply to the appropriate agency, and the award is conditioned on that agency's project-by-project approval.

The Department of Finance oversees "as-of-right" tax expenditures. Such benefits exist with respect to (a) the real property tax in designated areas of the city for certain types of investment or property ownership related to the creation or retention of certain types of jobs; (b) business income taxes for certain types of insurance, film production and a few other activities, and (c) the sales tax for certain airline purchases of aviation fuel. These "as-of-right" programs are discussed more fully in the next section of this paper.

Discretionary tax expenditures are awarded based on policy set by the administering agency. The major such exemptions are available for the real property tax, the mortgage recording tax and the sales tax. These tax expenditure programs are administered by EDC, and their use is discussed in the next section.

Capital Spending. The City of New York has distinct operating and capital budgets. Its capital budget is financed through long-term borrowing and investments in major physical assets. The borrowing is done through General Obligation bonds backed by the City's full faith and credit, Transitional Finance Authority bonds backed by the City's personal income tax revenue, Water Finance Authority bonds backed by water and sewer charges, and Hudson Yards Infrastructure Corporation bonds backed by real estate taxes and PILOT agreements with property owners in the designated area. The funds may be spent directly on a project by a municipal agency given the capital budget appropriation or that agency may pass the funds to an LDC which then contracts for a specific project. The EDC serves as a capital project implementation agency for multiple municipal agencies' projects with the capital funds typically passed to EDC via its master contract with SBS, but sometimes transferred from another agency to EDC. Municipal agencies also pass capital funds to other LDCs; for example, the Parks Department transfers capital funds to the Brooklyn Bridge Park LDC. Funds raised by the Hudson Yards Infrastructure Corporation are transferred to a separate entity, the Hudson Yards Development Corporation, for project implementation.

No clear rule exists to determine when a capital project is primarily for economic development purposes versus other municipal missions. In this paper capital projects managed by the EDC and other LDCs and projects managed directly by the SBS are categorized as capital spending for economic development.

Operating Expenditures. SBS undertakes economic development activities as part of its operations. In addition the EDC carries out operating programs using funds it raises through real estate operations, PILOT payments and other sources. LDCs have smaller operating budgets mostly related to real estate operations.

The operating activities are of three general types. First, SBS supports placement activities and training in specific occupational areas and in general work readiness skills. Second, the EDC and LDCs engage in real estate operations, commonly the management of city-owned property designated for development purposes. Third, the SBS and EDC conduct a variety of business development services such as liaising with Business Improvement Districts, creating entrepreneurship programs, and providing technical support to small businesses.

Conduit Financing. Governments aid businesses by establishing entities to issue bonds with interest exempt from federal, state and local income taxes, making borrowing costs lower than that of private businesses not enjoying the tax exemptions. The entity, which can be the IDA or an LDC, can issue such bonds backed by agreements between businesses and lenders (not the IDA or LDC) for payment of the bonds. These arrangements are known as conduit financing.

New York City's IDA provides conduit financing for private businesses. The Trust for Cultural

Resources is an LDC that does conduit borrowing for cultural institutions, and Build NYC[18] is an LDC that is a conduit borrower for both private firms and nonprofit organizations. The Trust only borrows on behalf of its 21 member organizations; Build NYC can serve a wide range of organizations and was established in 2011 after state law prohibited the IDA from serving nonprofit organizations.

Table 8 below summarizes the agencies involved in each of the types of activity involving financial resources.

Table 8: New York City Economic Development Entities and Tools

Organization	Tax Expenditures	Operating Programs	Capital Programs	Conduit Financing
Dept. of Finance	✓			
Dept. of Small Business Services		✓	✓	
NYC Housing Authority	✓			
NYC Economic Development Corp.	✓	✓	✓	
NYC Industrial Development Agency	✓			✓
Build NYC				✓
Coney Island Development Corp.			✓	
Brooklyn Bridge Park Corp.			✓	
Trust for Governor's Island			✓	
Brooklyn Navy Yard Development Corp.			✓	
Trust for Cultural Resources				✓
Hudson Yards Development Corp.			✓	

Zoning. Setting zoning rules is an important activity that does not directly involve the expenditure of public funds. As noted earlier, in New York City zoning is done by the CPC and the City Council.

Of course, the purpose of zoning is far broader than just economic development and includes public health concerns, housing affordability, transportation options and neighborhood preservation. But zoning can also be an important economic development tool by permitting and encouraging certain types of job growth in designated areas.

HOW WELL HAVE ECONOMIC DEVELOPMENT TOOLS BEEN USED?

Table 9 summarizes the amounts dedicated in fiscal years 2002 and 2012 to each of the four economic development tools requiring financial resources. Two points should be highlighted: The sums involved are large, and they have grown substantially. Tax expenditures more than doubled to approach $1.6 billion annually; capital spending nearly tripled to reach $751 million annually; about $1.4 billion was added to the amount of conduit debt outstanding, making the total nearly $9.7 billion. Operating budgets have also grown; in 2012 relevant operating expenditures were about $368 million, a larger sum than in 2002. How well have these expanding sums been used, and what can be learned from the experience of the past decade?

Below are some observations relating to each of the tools. Four basic criteria are considered:

1) Does the policy or program promote job growth?

2) Do benefits outweigh the costs?

3) Is program reporting transparent, regular and comprehensive?

4) Are results regularly monitored, reviewed and evaluated?

Table 9: Economic Development Support by Type, Fiscal Years 2002 and 2012

(dollars in millions)

Type of Support	2002	2012
Tax Expenditures	$591	$1,599
As of Right (Property)	222	722
As of Right (Other)*	295	604
Discretionary	74	273
Real Property	*74*	*265*
Other	*N/A*	*7*
Capital Spending	$275	$751
Economic Development Corp.	275	409
Hudson Yards Development Corp.	0	280
Other Development Corporations	N/A	62
Operating Programs	$226	$368
Small Business Services and Economic Development Corp.	198	300
Other Development Corporations	28	68
Conduit Financing		
Total Debt Outstanding	8,235	9,689
New Issuance (Annual)	660	360

N/A = Not Available

*2012 figure is for Tax Year 2009, the latest available data.

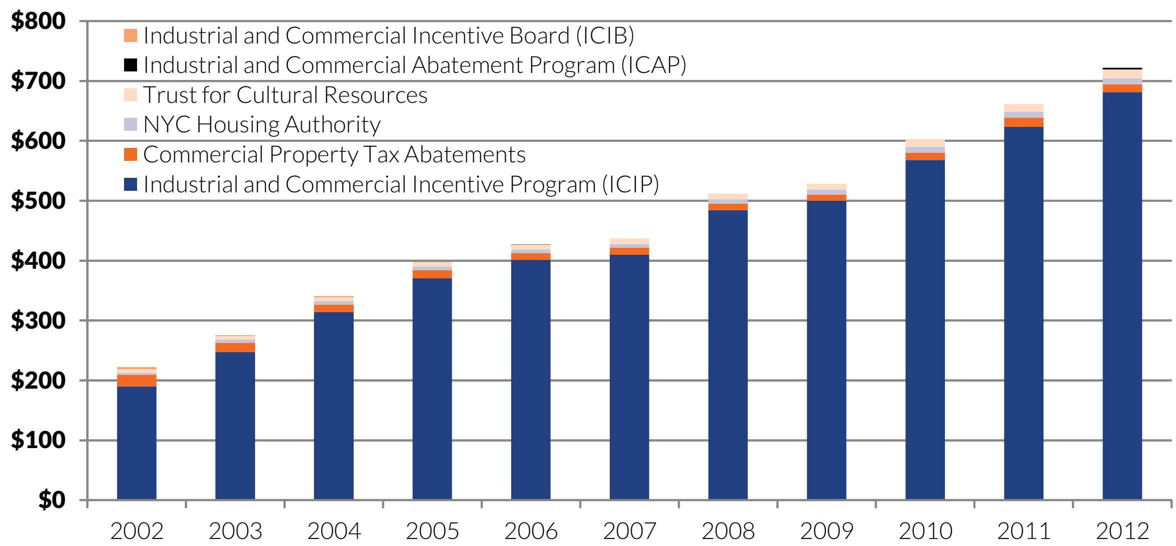
Source: See Appendix A.

Tax Expenditures

Tax expenditures are divided into three components for this analysis: as-of-right real property tax programs, other as-of-right tax benefits, and discretionary tax expenditures. As shown in Table 9, as-of-right property tax expenditures are the largest category, with the other as-of-right programs a close second.

As-of-Right Property Tax Expenditures. The major components of these $722 million in annual tax expenditures are the Industrial and Commercial Incentive Program (ICIP) and its successor Industrial and Commercial Abatement Program (ICAP). (See Figure 6.) The ICIP was phased out beginning in 2008, but the exemptions it granted were worth nearly $682 million annually in 2012; the new ICAP began giving abatements after 2008 and their 2012 annual value was $2.8 million.[19] The experience with this program is extensive growth in costs during a boom period that involved ineffective use of resources; efforts at reform aimed at improving the cost-effectiveness had significant positive, but still limited, results and reveal the difficulties of using such programs well.

Figure 6: Property As-of-Right Tax Benefits, Fiscal Years 2002-2012



Source: New York City Department of Finance, *Tax Expenditure Report,* Fiscal Year 2002-2012.

The ICIP was authorized in state legislation in 1984 as an attempt to reform a discretionary program with benefits given by an appointed board. The initial program allowed industrial and commercial properties to claim up to 25 years of tax exemption benefits in designated areas outside of the Manhattan central business district (CBD). In 1993 the program was expanded to include some types of projects in the CBD. In 1994 a court decision required the program to include utility projects. In 1995 the program was expanded to include more areas and building types in the CBD and to extend the years of project eligibility. By fiscal year 2002, ICIP covered 3,868 projects at an annual cost of $190 million.[20]

In subsequent years, during a period of economic growth, the program continued to be heavily used. An analysis by the IBO in 2008 found that nearly half of the program's costs, $248 million, were associated with projects that entered the program after 2003.[21]

In the midst of this growth, calls to assess the program grew, and in 2007 EDC studied the ICIP's effectiveness using a methodology that sought to determine the extent to which the program's benefits were actually inducing new economic activity. The analysis found that only 23 percent to 28 percent of projects were induced by the program's benefits; the rate was less than 10 percent for projects in the CBD.[22]

The ineffectiveness of the ICIP was related to five program features. (1) It gave benefits to retail development projects. EDC found that retail sales and employment were more sensitive to resident incomes than tax incentives, and that the retail component of ICIP cost the City nearly $1.3 billion from 1989 to 2007. (2) It gave benefits to utility projects. These investments were likely to occur without the incentives. Utility projects accounted for 1 percent of the number of projects but accounted for nearly one-fifth of total program costs. (3) The length of the benefits, sometimes up to 25 years, is longer than necessary to induce the investments. The study found developers rarely look beyond a 10 to 15 year horizon when assessing cash flows for projects. At the time of the analysis, approximately 65 percent of projects were receiving 25-year exemptions, creating avoidable long-term costs to the City.[23] Only 2 percent of projects required 25-year exemptions, rather than 15-year exemptions, to undertake the project. (4) The benefits were used heavily for Manhattan projects. The report found that since such projects were made eligible in 1994, more commercial office space square footage received ICIP benefits in the CBD, the area where ICIP was least likely to impact the decision to invest, than in the rest of the city combined.[24] (5) The program includes an appreciation factor in its benefits. That is, the value of the benefit increases as property appreciates; the benefit is tied to assessed value rather than to the initial investment amounts. This means in periods of rapid appreciation in property value, such as 2002 to 2007, the cost of the program rises rapidly.

Based on these concerns, the Bloomberg Administration proposed a series of changes to the program. However, the state legislature did not adopt all the proposed changes. While utilities were excluded, retail projects were not excluded and remain eligible on a revised basis. The maximum duration of benefits was reduced from 12 to 10 years for commercial projects in the CBD, but all projects in special areas designated for benefits remain eligible for 25 years. Other benefits provided in the CBD, such as eligible retail space in lower Manhattan, were lowered but not eliminated. The appreciation factor was modified so that beneficiaries pay taxes on the first five percent of annual appreciation, but gains greater than this remain exempt. In addition, the benefit was restructured from an exemption to an abatement; this has little impact on its value to developers, but has some benefit to the City in calculating the property tax limit and allocating tax levy shares.

The legislative changes also provide for a long phase out period. Previously granted benefits remained in effect. While the new ICAP program began on July 1, 2008, the previous ICIP program continued to accept applications until that date. Moreover, applications could be approved after July1, 2008,[25] and a large number of projects were approved after that date. The program had 6,030 beneficiaries on June 30, 2008, and 7,311 on June 30, 2012; if no older projects exited the program after 2008 – an extremely unlikely occurrence – at least 1,281 projects or 17 percent of the 2012 beneficiaries entered the program after the end date of June 30, 2008.[26] Only 35 projects were in the ICAP program in fiscal year 2012,[27] but this program may see increased applications and participation now that its predecessor can no longer accept projects.

Other As-of-Right Tax Expenditures. The more than $600 million annually in other as-of-right programs are concentrated on two industries – insurance ($365 million) and airlines ($117 million). (See Table

10.) In both cases the program has not been evaluated, and local employment in the target industry has declined.

Table 10: Selected New York City As-of-Right Tax Expenditures, Tax Year 2002-2009
(dollars in millions)

Program	2002	2003	2004	2005	2006	2007	2008	2009
Insurance Company Non-Taxation	$187	$215	$248	$256	$276	$303	$310	$365
Fuel Sold to Airlines	38	47	69	100	120	134	195	117
Commercial Revitalization Program	25	24	22	23	23	33	34	37
Energy Cost Savings	*19*	*N/A*	*18*	*20*	*19*	*28*	*29*	*32*
Commercial Rent Tax Abatement	*6*	*N/A*	*4*	*3*	*4*	*5*	*5*	*5*
Film Production Tax Credit	0	0	0	6	19	32	35	33
Energy Cost Savings Program	38	34	28	31	28	29	25	29
Relocation and Employment Assistance Program	7	7	8	17	17	23	22	23
Total	$320	$327	$397	$456	$506	$587	$655	$604

N/A - Not Available

Note: The Film Production Tax Credit expired in 2011. The Relocation and Employent Assistance Program and the Energy Cost Savings program stopped accepting new applicants in 2013.

Source: New York City Deptartment of Finance, *Tax Expenditure Report*, Fiscal Years 2005-2013.

The benefit for insurance companies dates from 1974. As an incentive to keep insurance company jobs in the city, insurance companies operating in the city are allowed to deduct from their taxable revenue the income from premiums on insurance covering property in the city. The cost of this benefit nearly doubled from $187 million to $365 million between 2002 and 2009. Insurance carrier employment in the city decreased nearly 6 percent over the same period, with many factors in addition to the tax exemption underlying this trend.[28]

Airlines benefit from a sales tax exemption on fuel sold to airlines at Kennedy and LaGuardia airports, which was authorized in 1965. The goal is to continue and expand airline activity at the New York airports. The program cost tripled from $38 million to $117 million between 2002 and 2009. Local air transportation and support activities employment remained flat during the same period, with many factors in addition to the exemption underlying this trend.[29]

Two other, more recent, industry-specific programs provide instructive contrasts to the insurance and airline targeted programs. The film production tax credit seeks to promote film production within the city, and the biotechnology industry program provides credit for new firms in that industry. Each program was authorized for a specific time period, and each has a cap on the amount of annual credits. The film production program was authorized for 2005 to 2011 with a $30 million annual cap; the biotechnology program spans 2010-2015 with a $3 million annual cap. To date the experience with the biotechnology program is limited, and it is open only to firms with less than 100 employees that grow employment by at least 5 percent. However, the film tax credit program was not renewed after the initial program expired. A New York State film production tax credit continues at an expanded level, and the effectiveness of these programs in attracting new activity has been questioned in several studies of other states' programs.[30]

Three other as-of-right programs are intended to promote economic activity outside the core of the CBD. Each of the programs was established before the terrorist attacks in 2001, but they were expanded with new or greater benefits to parts of lower Manhattan after the attacks. No evaluation of the effectiveness of these programs has been conducted.

The Energy Cost Savings Program (ECSP) gives business income tax credits to utilities that give discounted electricity or gas to qualifying firms for up to 15 years. Eligible firms are those moving into new or renovated space outside Manhattan or in Manhattan north of 96th Street. Similar benefits to firms in Lower Manhattan and the Garment District are provided as part of the Commercial Revitalization Program. Benefits under the ECSP program declined between 2002 and 2009, the latest year for which data are available.

The Commercial Revitalization Program (CRP), begun in 1995, serves Lower Manhattan and the Garment district. It includes an ECSP benefit and commercial rent tax abatement for firms moving into the area. The ECSP benefit is larger than the rent tax abatement, and it has grown more rapidly.

The Relocation Employment Assistance Program began in 1986; it provides benefits to firms relocating outside Manhattan and Manhattan north of 96th street. In 2004 it was extended to firms relocating to Lower Manhattan south of Murray Street. It gives a business income tax credit of $3,000 annually per eligible employee for up to 12 years. Between 2002 and 2009 benefits tripled to $23 million; in 2013, the program's authority to accept new beneficiaries expired.

Discretionary Tax Expenditures. The EDC administers discretionary tax expenditure programs, granting benefits based upon applications from, and negotiations with, firms that are not eligible for as-of-right benefits or that seek greater subsidies than the as-of-right programs provide. The available benefits include one-time exemptions from the mortgage recording tax on transactions involved in the investment and from sales taxes on purchases for the project. Far larger are recurring real estate tax benefits on the property involved. The property tax benefits are often granted by IDA or are created by having either the City, EDC or IDA own the property (making it exempt) and leasing it to the private firm with required payments in lieu of taxes (PILOTS) from the firm that are less than the real estate tax payments would be if the firm owned the property. The IDA can tailor the amount of the PILOTs to suit the deal with the benefits available for up to 26 years.

The net value of the annual real estate tax benefits grew from $73.7 million in fiscal year 2002 to $265.3 million in fiscal year 2012. (See Table 11.) The number of active projects declined from 901 to 830 in

Table 11: New York City Economic Development Corporation Administered Tax Expenditures by Program, Fiscal Years 2002-2012
(dollars in millions)

Tax Expenditure Type	2002	2003	2004	2005	2006	2007*	2008	2009	2010	2011	2012
Real Property Tax	$73.7	$74.3	$95.0	$112.4	$88.3	$109.1	$126.5	$132.8	$193.7	$259.3	$265.3
Sales and Use Tax	N/A	N/A	N/A	12.8	6.4	18.3	21.7	2.8	2.0	1.7	5.4
Mortgage Recording Tax	N/A	N/A	N/A	3.1	6.6	76.3	3.7	0.5	0.4	0.6	1.4
Utility Tax	N/A	N/A	N/A	0.4	0.2	0.5	0.8	0.6	0.7	0.8	0.5
Total	$73.7	$74.3	$95.0	$112.4	$88.3	$109.1	$126.5	$132.8	$193.7	$259.3	$272.6

N/A - Not Available

*2007 figures for sales and mortgage recording tax exemptions reflect stadia projects.

Source: Real property tax figures from NYC Department of Finance, *Tax Expenditure Report*, Fiscal Years 2002-2012. All other figures from New York City Economic Development Corporation, *Annual Investment Projects Report*, 2005-2012.

the same period, with the average annual benefit per project more than tripling from about $82,000 to $287,000.[31] In fiscal year 2013 the number of projects dropped to 690 with average benefits of about $334,000.[32] This indicates a shift toward fewer, larger projects receiving benefits.

Two of the large projects are the New Yankee Stadium and Citifield, both approved in 2006. Each included large mortgage recording tax exemptions and sales tax exemptions for construction materials. Each also involved new real property tax exemptions; the old stadiums were owned by the City while the new stadiums are privately owned and benefit from real property tax exemptions.

Table 12: Characteristics of Projects with Discretionary Tax Benefits, Fiscal Years 2010 and 2011

Project Name	Borough	Discretionary Benefits* (in thousands)	Benefit Per Job*
Construction Total		$3,030	
J & J Johnson General	Queens	$1,665	$48,964
Richards Plumbing	Brooklyn	$1,366	$23,959
Food Retail Total		$86,926	
Fresh Direct	Bronx	$76,331	$26,078
East Gun Hill Road - Fine Fare	Bronx	$4,497	$56,214
Kingdom Castle Food Corp.	Staten Island	$2,003	$60,698
Moisha's Supermarket	Brooklyn	$1,932	$35,119
Pain D'Avignon	Queens	$1,196	$14,762
ReyCo Supermarkets	Manhattan	$538	$19,930
3462 Third Ave	Bronx	$429	$15,326
Manufacturing Total		$9,956	
ACA Quality Building	Bronx	$3,698	$115,572
Smith Electric	Bronx	$2,279	$37,368
Dasny Mechanical	Queens	$1,850	$59,662
Accurate Specialty Metal Fabricators	Queens	$1,416	$31,474
Diamond Concrete	Staten Island	$712	$64,755
Professional Services Total		$14,630	
Deloitte LLP	Manhattan	$14,148	$2,242
Halmark Architectural	Brooklyn	$482	$34,421
Wholesale Total		$32,052	
Manhattan Beer Distributors	Bronx	$24,322	$39,229
Lobonav Corp.	Brooklyn	$1,661	$42,585
Soho Studio Corp.	Brooklyn	$1,551	$59,653
Big Farm Wholesale	Bronx	$1,411	$176,375
Oh Nuts Warehousing	Brooklyn	$1,267	$43,703
Mediterranean Gyros	Queens	$1,112	$35,866
Baco Enterprises	Bronx	$729	$9,588
Other Total		$43,156	
Extell (Real Estate)	Manhattan	$31,771	$13,589
Idlewild 228th (Warehouse/Transportation)	Queens	$4,953	$26,770
Hudson Moving (Transportation)	Manhattan	$3,250	$101,556
Brooklyn Union Gas (Utilities)	Brooklyn	$3,183	$397,838

*Based on 25-year Net Present Value calculation for project approval.

Source: New York City Industrial Development Agency, Board of Directors Meeting, July 2010-June 2012.

Table 12 presents selected characteristics of the 27 projects approved for discretionary benefits in fiscal years 2010 and 2011. Three important observations emerge from the data. First, there is wide variability in the amount of benefit awarded per job – from $2,000 to nearly $398,000. This suggests widely varying criteria for determining discretionary benefits.

Second, the firms receiving benefits are frequently in industries with limited potential for mobility outside the metropolitan area. Only five of the projects, with benefits equaling just 4 percent of the total, were manufacturing firms. Seven projects, including the single largest, were retail food firms, who are unlikely to reach their local market from locations outside the city. These projects include a distribution site for Fresh Direct for food delivery and six projects that are part of the “FRESH” program to increase the availability of healthy foods in low-income neighborhoods. Another seven were wholesale firms who also are likely to require locations within the region, if not the city.

Third, the total amount of benefits is driven by a few large projects. Among the 27 projects only four had benefits exceeding $10 million, and they accounted for nearly two-thirds of the total benefits. The single largest project alone accounted for nearly one-third of total benefits.

Not documented in Table 12 is another important point about the discretionary benefits — they are often given along with other incentives. Notably, state tax benefits can be given on top of the local tax benefits. Of the 27 projects analyzed, 25 also received state sales tax exemptions and 21 received state mortgage recording tax exemptions. The state tax exemptions are granted by the IDA (effectively an arm of EDC) and are typically negotiated along with the local discretionary tax benefits. In addition, the IDA can provide conduit financing, and this too may be negotiated as part of an incentive package. Another enhancement may be direct city capital funding of a portion of the project and/or related infrastructure improvements such as highway ramps and bulkheads. Of the 27 projects analyzed, one also received conduit financing and another received capital funding.

The "bundling" of benefits, the multi-year nature of the tax benefits, and the lack of equivalency in measuring benefits from tax breaks and conduit financing (foregone taxes versus lower interest rates) make it difficult to identify and report the total benefits given to a project. Efforts to enhance the transparency of discretionary incentive packages have met with limited success. In 1993 a local law required EDC to issue an annual report detailing the value of benefits awarded for an eight year period. This proved less than satisfactory because of lack of consistency in the method for valuing benefits and the awarding of benefits for more than an eight-year period. In 2005 the reporting requirements were expanded in an effort to deal with these issues and in 2012 the report was required to be published as a database for public use. This has led to significant improvements, but transparency is still limited due to the exclusion of benefits not controlled by EDC (property owned by the City rather than EDC is excluded as are as-of-right tax benefits) and the continued use of varying discount rates to report future tax benefit values.[33]

Capital Spending

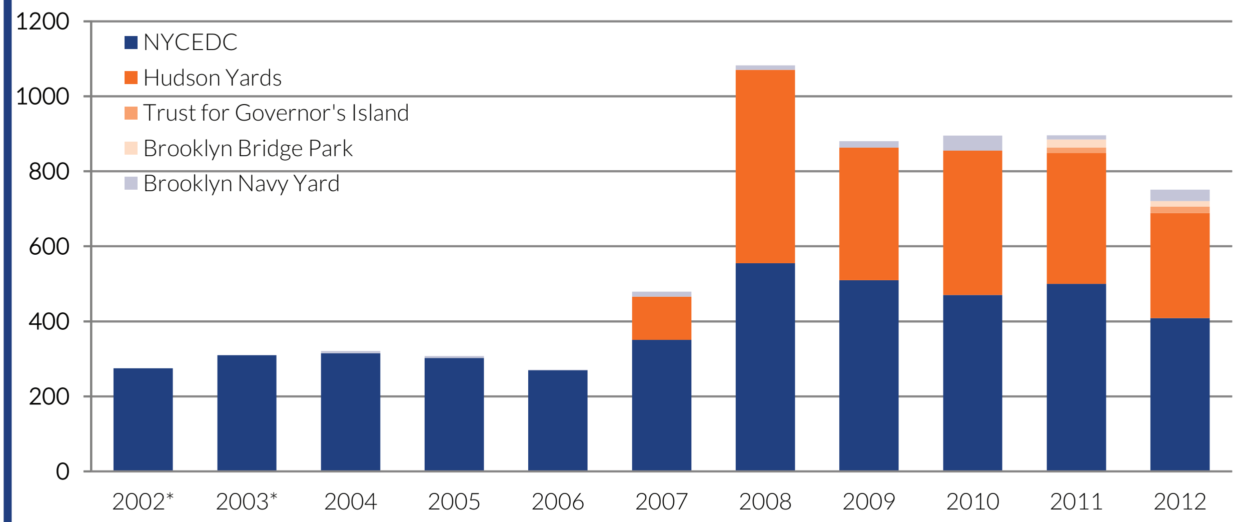
During the Bloomberg Administration all capital spending increased substantially, and this is also the case for capital spending for economic development. Such spending grew from $275 million in fiscal year 2002 to $751 million in fiscal year 2012. (Refer to Figure 7.)

A major component of this expansion is investment by the Hudson Yards Development Corporation. This project is extending a subway line from Times Square to the far west side and creating infrastructure for development of residential and commercial property over the existing train yards. The total local investment is expected to be $3.0 billion; of this total, $280 million was spent in fiscal year 2012.[34] The project is expected to have extensive benefits in the form of increased property values and added jobs, and its financing is backed by projected increases in local property tax collections and/or PILOTs.

A second component of the expansion is the City's awarding of capital funds to LDCs. The $62 million in fiscal year 2012 includes $30 million to the Brooklyn Navy Yard, $17 million to Governor's Island, and $15 million to Brooklyn Bridge Park. In each case these are part of multi-year capital commitments to the projects, and the latter two projects began receiving City funds after 2010.[35] These projects are not been completed, but each also is widely viewed as having already yielded significant benefits with more in the future.

The more problematic of the growing capital investments are those managed by EDC. EDC's spending raises two issues: (1) A tendency toward "mission creep" with EDC taking on capital projects for

Figure 7: Capital Spending on Economic Development, Fiscal Years 2002-2012



* Capital spending for Brooklyn Navy Yard unavailable in these years.

Source: Figures for NYCEDC equivalent to "program costs" available from New York City Economic Development Corporation, *Audited FInancial Statements*, Fiscal Years 2002-2012. Figure for Hudson Yards equivalent to "project costs" from Hudson Yards Infrastructure Corporation, *Audited Financial Statements*, Fiscal Years 2008-2012. Figures for Brooklyn Navy Yard equivalent to change in "Inception to Date" expenditures for projects E-319, E-C319, E-D319 and E-K319 from New York City Office of Management and Budget, *Adopted Capital Commitment Plan*, Fiscal Years 2004-2013. Trust for Governor's Island, *Audited Financial Statements,* Fiscal Years 2011-2012. Brooklyn Bridge Park Corporation, *Audited Financial Statements*, Fiscal Year 2011-2012.

municipal agencies not closely tied to economic development. The rationale is more that EDC manages capital projects well and has fewer procurement restrictions than municipal agencies, rather than that the project has great economic development benefits. (2) Projects focused on economic development are not consistently evaluated in advance on that basis; while many seem successful, more explicit cost-benefit analysis could improve decision making.

Table 13 shows the EDC's capital spending by the municipal agency that is the source of the funds. Only about $180 million, or

Table 13: Economic Development Corporation Capital Expenditures by Agency Source, Fiscal Year 2012

Agency Name	Amount
Department of Small Business Services	$179,593,180
Department of Parks and Recreation	56,557,875
Department of Environmental Protection	34,789,709
Department of Sanitation	27,826,305
Department of Cultural Affairs	27,387,597
Department of Transportation	23,705,818
Health and Hospitals Corporation	12,582,895
Fire Department	10,268,094
Housing Preservation and Development	8,355,360
Department of Citywide Administrative Services	4,338,977
Department of Social Services	3,635,087
Department for the Aging	2,567,472
Department of Health and Mental Hygiene	2,144,879
Department of Information Technology and Telecommunications	300,000
Total*	$394,053,246

*Spending total does not match the figure in Table 9 due to differences in annual allocation from City agencies and actual expenditures by EDC.

Source: NYC Comptroller's Office, Checkbook NYC 2.0, Fiscal Year 2012, http://www.checkbooknyc.com.

about 46 percent of the total, is from SBS. The projects supported by other agencies include many with no clear connection to economic development goals. For example, among the $57 million EDC spent for the Parks Department is $42 million for a new lakeside center in Prospect Park that includes a new skating rink. Similarly, $48 million from the Sanitation Department is being used to help a private firm build a recycling facility in Brooklyn as part of the Department's larger waste management plan; if this project were analyzed as serving economic development goals, its cost per job would be $480,000.

Table 14 identifies capital projects managed by EDC since 2002 that had a cumulative cost greater than $50 million. Included in the list are some projects not clearly tied to economic development such as the Flushing Meadow pool and ice rink and the funding for the new Whitney Museum. The list also provides examples of projects related to economic development, but for which no cost-benefit analysis was undertaken to justify the investment. Less rigorous retrospective analyses suggest some of these investments are successful. For example, Hunts Point received investments in buildings, bulkheads and streetscapes to accompany the relocation of the Fulton Fish Market, amounting to more than $99 million; the number of wholesale, transportation and warehousing firms operating in that area grew by nearly 16 percent and firms with more than 100 employees grew from 12 in 2002 to 16 in 2011, despite a drop in the industry's employment citywide.[36] Similarly, investment in the Brooklyn Academy of Music and its surrounding area are part of the revitalization of the area, resulting in an increase in activity there. Between 2002 and 2011, arts and recreation establishments in the area around the BAM increased from 35 to 84.[37]

Table 14: Economic Development Corporation Capital Projects Greater Than $50 Million, 2002-2013

(dollars in millions)

Project	Capital Committed
Gotham Center	$316
Manhattan Cruise Terminal	$200
Yankee Stadium Park Space	$195
Whitehall Ferry	$158
South Brooklyn Marine Terminal	$135
St. George Ferry	$130
Brooklyn Academy of Music	$100
Applied Sciences Campus	$100
Hunts Point Market and Development	$99
Staten Island Railroad Reactivation	$80
Flushing Meadows Pool and Ice Rink	$66
Battery Maritime Facility	$60
Whitney Museum	$55
Brooklyn Cruise Terminal	$52

Note: Capital committed reflects reported project costs and may include some private funds.

Source: Corporation Project Database and New York City Capital Commitment Plans, Fiscal Years 2004-2013, http://www.nycedc.com/projects and http://www.nyc.gov/html/omb/html/publications/publications.

However, other investments have yielded less positive returns in terms of expanded economic activity. For example, the $52 million investment in the Brooklyn cruise terminal has no cost-benefit analysis available, and there is no clear evidence it is yielding a positive return on investment.

Conduit Financing

Conduit financing is a cost-effective tool for municipal government to spur economic activity. Large sums of investment capital can be raised at low interest rates for private firms and nonprofit organizations, but most of the interest subsidy is borne by the federal and state governments with a smaller share from foregone local income taxes.

The Bloomberg Administration used this tool on a large and growing scale. Much of the new funding was targeted to the health and education services sector, and it likely helped stimulate the job growth in those industries.

Between fiscal years 2002 and 2012 the New York City IDA, Trust for Cultural Resources and Build NYC[38] completed bond issues supporting 226 projects with a total face value of more than $9.2 billion. (See Table 15.) Fully 135 of these issues with a value of about $2.2 billion were for health, education and social service organizations. Another 25 issues totaling nearly $3.5 billion were for arts and recreational organizations; nearly two-thirds of that money is accounted for by two large baseball stadiums and enhancement of the National Tennis Center with the remainder issued by the Trust for Cultural Resources. Nearly $1.3 billion of the $1.7 billion for transportation is accounted for by a new American Airlines Terminal. In contrast to these large investments, the 17 bond issues for manufacturing firms raised $86 million, less than 1 percent of the total.

Table 15: Number of Projects and Value of New York City Conduit Financing, 2002-2012
(dollars in millions)

Industry	Number of Projects	Debt Issued
Arts and Recreation	25	$3,451
Transportation and Warehousing	8	$1,679
Educational Services	53	$1,370
Health and Social Services	82	$793
Real Estate	6	$699
Other Services	19	$606
Finance and Insurance	5	$316
Manufacturing	17	$86
Information	3	$78
Accommodation and Food	2	$65
Professional, Scientific and Technical Services	1	$47
Retail Trade	1	$20
Construction	2	$11
Administrative and Waste Services	2	$4
Total	226	$9,220

Note: Organizations that received funding from bonds issued in different fiscal years count as one project in each of those fiscal years.

Source: CBC calculation based on Schedule of Bonds & Notes Outstanding for Fiscal Year 2012 for the New York City Industrial Development Agency, Build NYC, and New York City Capital Resource Corporation. Data also includes Schedule of Bonds & Notes Outstanding for Calendar Year 2012 for the Trust for Cultural Resources, http://www.tcrnyc.org/FinancialReports/ReportsAndDocuments.html.

Conduit financing has generally posed little risk for the City. Borrowers are screened to meet criteria relating to ability to repay the debt, and legally the borrower, not the City, is responsible for the debt. Nonetheless, some risk is involved, as is occurring with a loan for the firm building and operating the parking lot near the new Yankee Stadium. Revenue from the parking lot has not been sufficient to meet all expenses including the debt service, and the firm is defaulting on the loan. While the City has not taken over the loan, it is suffering because the firm is also not making PILOT payments to the City that are part of the package of incentives that includes discretionary tax breaks.[39]

Operating Programs

The approximately $368 million spent in agency operating budgets goes toward three types of activities: (1) Real estate management accounts for about $90 million or nearly 25 percent. EDC manages multiple properties that it and the City own, and other LDC's also manage their properties. (2) Workforce development programs account for about $47 million. This includes training and placement services provided by SBS. (3) Other services to assist neighborhood and industry-based business development and encourage entrepreneurship are provided by SBS and EDC and total to about $91 million. The remaining funds, $140 million, support staff and general overhead costs not allocated to specific functions or programs.

Real estate management is the least controversial of these activities. There are no systematic benchmark indicators for assessing how each of the LDCs performs on this task, and comparison between EDC and the Department of Citywide Administrative Services have not been undertaken.

However, EDC engages in some innovative activities that distinguish its efforts. It offers incubator workspaces for similar firms, attempting to take advantage of potential clustering effects.[40] Biomedical, mobility and clean technology, fashion, food, arts, and media industries each have a dedicated space, with biotechnology and life sciences having more than one. Entrepreneurs and businesses in the Bronx have also received targeted assistance by way of incubation space.

The workforce development programs are part of broader citywide efforts, some of which are undertaken by community colleges and some by the Human Resources Administration and other agencies to help low income families. The SBS activities included as part of the economic development programs are career coaching, vocational training, sector-based training and placement, employer outreach efforts, short-term internships for youth, and community outreach to refer clients to Workforce1 Centers. Workforce1 Centers contract with SBS and provide employer-employee matching services. Workforce1 registrants increased from 21,146 in 2002 to 73,518 in 2012, but placements did not keep pace. Changes to the way SBS calculates its placements – now requiring placement verification from the employer – make it difficult to track the success of the program over time. Placement rates in 2002 were estimated at nearly 88 percent, more than double the 42 percent rate for 2012; those reported as placed in jobs increased from 18,524 to 30,900.[41] The SBS "Business Solutions" program helps businesses and entrepreneurs navigate the City's system of benefits**.** Business courses, legal assistance, financing assistance, accessing government incentives, government regulation support, M/WBE certification and recruitment and training are services provided. SBS also liaises with Business Improvement Districts, sometimes offering some financial support.

EDC also offers programs to educate business owners and entrepreneurs, holds competitions for startup businesses, inventors and web application developers, helps employers sustain growth through business plan and hiring support, and markets the City to international firms and governments. Little is reported about the number of clients served or the cost-efficacy of these programs.

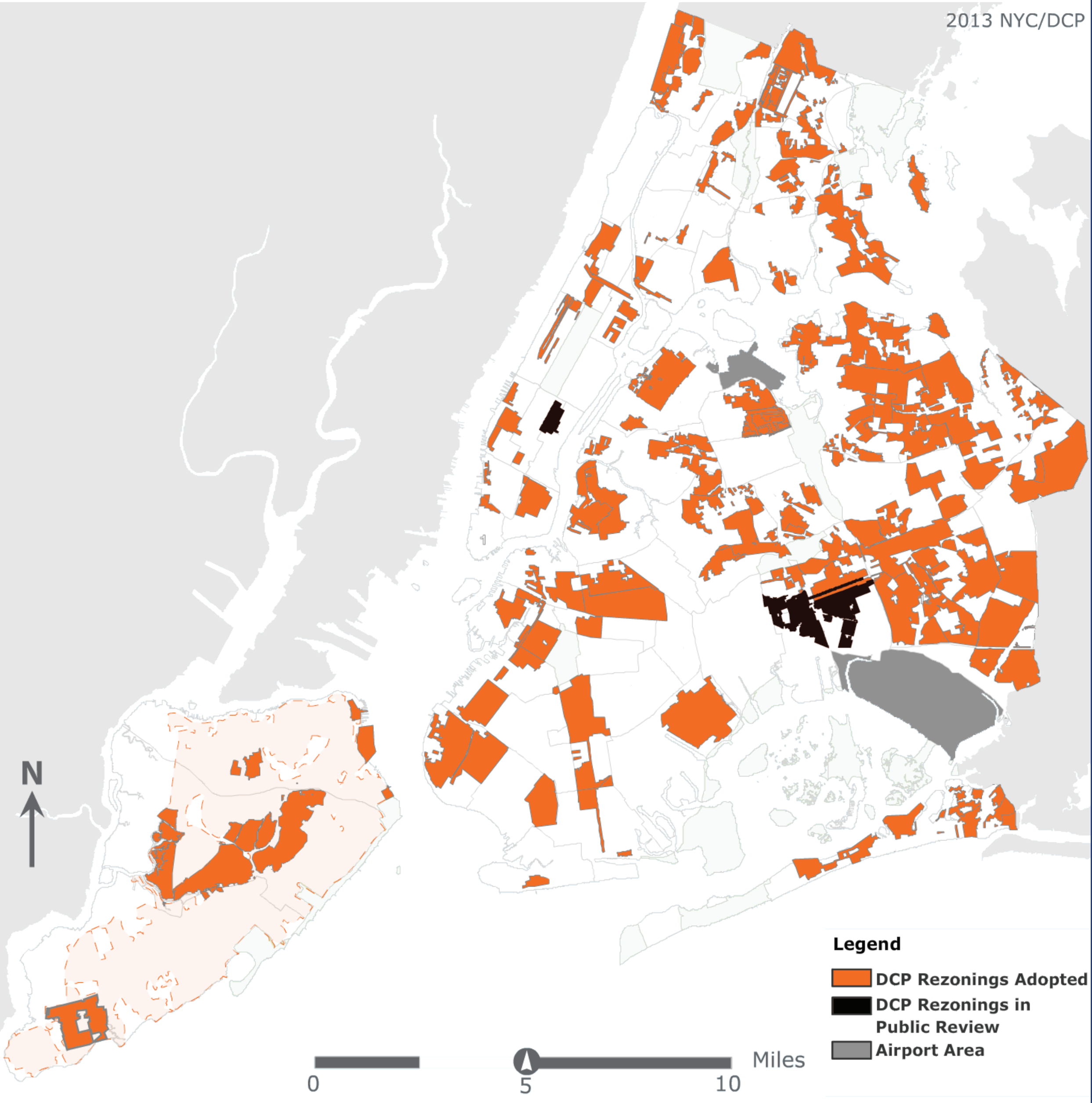
Zoning

Unlike the other tools discussed above, zoning does not require the outlay of operating or capital expenditures. This regulatory tool has been used aggressively by the Bloomberg Administration, with City Council cooperation. Since 2002 more than 36 percent of the city's land area has been rezoned. (See Figures 8 and 9.)

These wide-scale changes have impacted neighborhoods in all five boroughs, but they have had particularly positive effects along the waterfront and in Eastern Queens. Many of the changes supported residential and mixed use development along existing commercial corridors or the waterfront. In the case of waterfront rezonings, the changes along the East River have been "up-zonings" from heavy industrial use to light industrial and mixed uses. These changes have supported investment and job growth in previously under-developed neighborhoods such as Williamsburg, Greenpoint, and Long Island City.

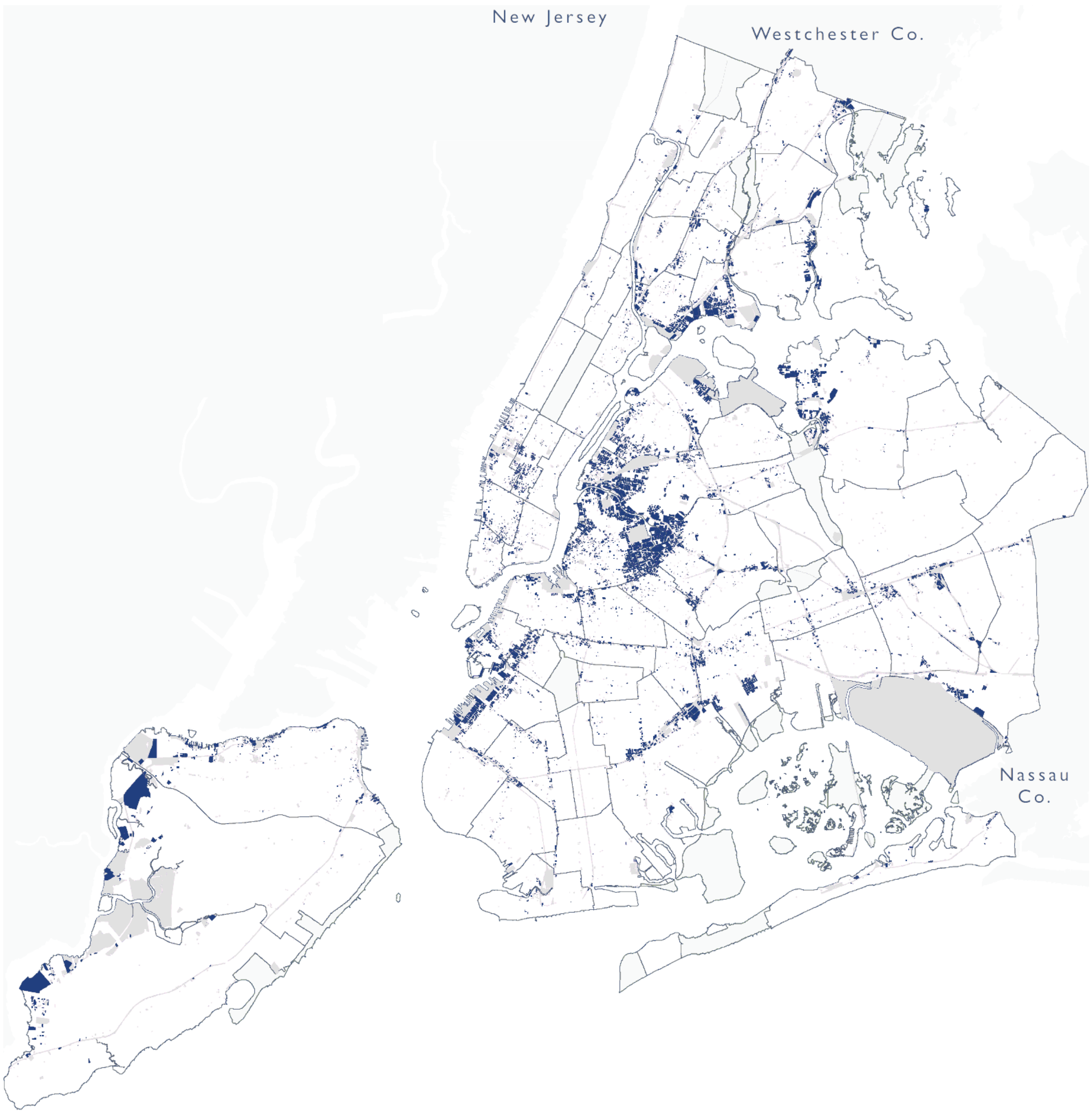
One feature of some rezonings fostering employment growth is the enhanced utilization of special districts. Special districts encourage mixed industrial, commercial and/or residential use within close proximity. Such districts were established in Red Hook, Greenpoint-Williamsburg, Downtown Brooklyn, Coney Island, DUMBO, Gowanus, Park Slope, and Bedford-Stuyvesant. Each of the special districts takes advantage of varying economic contexts, building on existing industry strengths while allowing for new industry development.

Figure 8: New York Rezonings, 2002 to 2013



Source: New York City Department of City Planning, DCP Rezonings: 2002-2013, accessed November 21, 2013, http://www.nyc.gov/html/dcp/html/rezonings/rezonings.shtml

Figure 9: Areas Zoned for Industrial Use, New York City, 2010



Source: New York City Department of City Planning, New York City Industrial Uses and Infrastructure by Tax Lot and Community District, 2010, http://www.nyc.gov/html/dcp/pdf/landusefacts/nycind.pdf.

LESSONS FOR THE NEXT ADMINISTRATION

In seeking to extract lessons for the next administration from the experience of the past decade, it is important to go back to the point with which this paper began. Much of what happens to the local economy will be driven by contextual forces not included in the scope of traditionally defined economic development programs. How well the next administration deals with threats to public safety, efforts to improve public schools, methods to welcome and incorporate immigrants, and fiscal decisions that shape the competitive tax environment are likely to be more influential than decisions about the use of conventional economic development tools.

Nonetheless, it is worth asking: What can be learned from the experience in the recent past? Six lessons emerge.

1. Use capital investments to enhance infrastructure in neighborhoods with job growth potential.

The Bloomberg Administration made effective use of infrastructure investment to enhance economic activity in underdeveloped areas throughout the city. Examples include Hunts Point, Downtown Brooklyn and the emerging Hudson Yards. The capital invested in these areas spurred and augmented private investment in trade, transport, and tourism industries. These investments will continue to be utilized productively even if individual firms move away; a functioning cluster of economic activity likely will sustain itself over time.

The new administration will have new opportunities to identify communities that can benefit from infrastructure investment for enhancing the productive capacity of the entire neighborhood, rather than supporting individual firms as beneficiaries. Recent investments in and around Jamaica Center in Queens might be continued and accelerated in pursuit of the potential benefits the emerging transportation hub provides to local accommodation and retail industries. An area for investment in freight transportation is the west shore of Staten Island. Despite industrially zoned space and good highway access, employment in wholesale trade and manufacturing there has stagnated. New investment to enhance transportation capacity through street upgrades and highway access, coordinated with Port Authority investment to strengthen connectivity of its marine terminal there, may stimulate development and support industrial job growth in an area well-suited to sustain it.

2. Encourage growth in the cultural, medical and educational sectors by enhancing access to capital through conduit financing.

Health and education services, along with the tourism-related activities of cultural institutions, have been responsible for a major segment of the city's recent economic growth. This expansion has been facilitated by the availability of new capital through conduit financing arranged by municipal agencies. IDA, Build NYC and the Trust for Cultural Resources supported 228 organizations by issuing more than $9.2 billion in low-cost capital for these organizations since 2002. Literally billions of dollars of capital have been raised with minimal cost to city taxpayers; a reasonable estimate is that the City lost about $18.4 million or less in foregone income taxes on the interest payments on those bonds in the past year.[42] This cost-effective device has been used to help nonprofit institutions, and the strategy should be extended in coming years.

A corollary to the use of conduit borrowing as a primary source for capital for nonprofit institutions is to avoid or minimize direct capital grants as a source of funds for those institutions. In recent years the City has given substantial capital grants to cultural institutions such as the Whitney Museum, the

Museum of Modern Art and Lincoln Center, among others. Whenever possible, conduit financing should be used instead of direct capital grants.

3. Continue reform of as-of-right tax expenditure programs to make them more cost-effective.

As-of-right tax expenditure programs are the single largest element in dollar terms in the City's economic development tool box, costing $1.3 billion annually. Yet they have been shown to be wasteful by giving subsidies that do not make a difference in firms' location decisions. Reforms in 2007 made substantial improvements in the ICIP, but they did not go far enough. A new package of reforms should be designed and advocated for in the legislature, including greater restrictions on retail benefits, shorter duration of benefits, limits on growth in benefits due to appreciation, and tighter geographic limits on project location.

The decades old as-of-right benefits relating to the insurance industry and the sales tax on airline fuel are ripe for evaluation. They may be cost-effective, but no analysis has addressed this issue. The next mayor should ask EDC or an independent commission to assess these programs and suggest reforms to make them more effective.

4. Establish clearer standards for awarding discretionary tax expenditure benefits.

By definition, discretionary benefits are awarded based on the judgment of public officials in situations where the firmer rules of as-of-right programs are not seen as appropriate. While variability in benefits is needed in these situations, current practice seems to allow far too much variation in the level of support firms receive. As shown earlier, the subsidy per job for projects in the discretionary programs varies from $2,000 to $398,000 and the annual cost of these benefits now is $238 million. The IDA's "Uniform Tax Exemption Policy" (UTEP) should be supplemented with additional guidelines for the award of these benefits.

A possible step toward more reasonable standards is to establish a cap on the level of per job subsidy. This need not be a single amount, but can be tied to the wage or productivity level of the industry in which the jobs are to be created. For example, the cap could be half the annual value added per job in an industry. Additional metrics relating to private investment leveraged by the projects may also be appropriate.

Whatever criteria are selected, the calculation should include all the benefits awarded to the project including those through other programs such as state tax expenditures and conduit financing. Since discretionary benefits are often bundled with other benefits, the entire package should be the basis for determining the maximum benefit.

5. Continue rezoning and expand special mixed use districts to facilitate diversified job growth in areas currently limited to industrial use.

The extensive rezoning of the past decade has had positive results in terms of employment expansion as well as greater residential capacity. Yet opportunities remain for additional zoning changes that would encourage job creation.

Such opportunities likely exist in the large tracts of waterfront land in Brooklyn and Queens zoned for "M" use, a designation required for "industrial" uses. (See Figure 9.) Areas zoned this way, including waterfront property in Red Hook, Williamsburg, and Sunset Park, require larger than normal buffers from other land uses. Areas zoned as "M3," required for heavy industrial uses, are especially restrictive in the types of businesses that can operate there, excluding many growing commercial businesses.

In an economy as dynamic as New York's, it is unwise to use zoning as a form of protectionism for manufacturing. The city experienced a steep drop in manufacturing employment over the past 12 years, a loss of more than 100,000 jobs to 76,400. This drop is far steeper than manufacturing employment losses at the national level during the same period, and the decline continued through the City's employment expansion in the mid-2000s. Even as the country has seen some manufacturing growth in the recovery from the Great Recession, manufacturing employment in New York City continues its downward trend. Reserving land for manufacturing plants does not mean it will actually get used in that way; instead, it may lay fallow.

Areas previously reserved for industrial use can accommodate growth in the retail and service sectors. Professional, business and technical services have been a source of growth in areas highlighted as economic development success stories, including the Brooklyn Navy Yard and areas adjacent to Bush Terminal; those services grew more than 130 percent in these two areas since 2000.[43]

6. Better manage EDC by focusing on job creation and enhancing transparency.

The EDC has played an important, positive role in the economic development achievements of the Bloomberg Administration. Yet two aspects of its management can be improved.

First, EDC, in part because of its success, has been asked to take on new tasks and a broader mission. Municipal agencies in addition to SBS are transferring capital funds to EDC in order to have EDC manage their capital projects. This happens even when the project bears little relationship to economic development goals because municipal agencies are burdened by out-of-date procurement rules and limited project management capacity.

This serves neither party well. EDC must spread its managerial attention more broadly, and focuses less clearly on job creation. For municipal agencies, this approach diverts attention from the core issue of necessary procurement reforms and prevents them from becoming more competent in carrying out their own projects, a capacity that ought to be encouraged.[44] Simply put, EDC should be asked to do less for other municipal agencies.

Second, EDC has not met high standards of transparency in the way it administers discretionary tax exemptions and other benefit programs. The report mandated by local law falls short of providing the information needed to assess and compare the benefit packages. Rather than responding to City Council mandates, the EDC should use its expertise to take the lead in designing full disclosure reports that provide the public with all appropriate and necessary information. It should cover the total "bundle" of incentives in a deal with a firm and relate the benefits to the predetermined standards for per job incentives recommended above.

APPENDIX A: SOURCE FOR ECONOMIC DEVELOPMENT ESTIMATES IN TABLE 9

	2002	2012
Tax Expenditures		
As-of-Right (Real Property)	NYC Department of Finance, *Tax Expenditure Report*, Fiscal Year 2002.	NYC Department of Finance, *Tax Expenditure Report*, Fiscal Year 2012
As-of-Right (Other)	NYC Department of Finance, *Tax Expenditure Report*, Fiscal Year 2005. Figure is for Tax Year 2002.	NYC Department of Finance, *Tax Expenditure Report*, Fiscal Year 2013. Figure is for Tax Year 2009, the latest available.
Discretionary (Real Property)	NYC Department of Finance, *Tax Expenditure Report*, Fiscal Year 2002. Combined IDA and EDC exemptions used. Figure net of PILOT payments.	NYC Department of Finance, *Tax Expenditure Report*, Fiscal Year 2012. Combined IDA and EDC exemptions used. Figure net of PILOT payments.
Discretionary (Other)	NYC Department of Finance, *Tax Expenditure Report*, Fiscal Year 2005. Figure is for Tax Year 2002.	NYC Department of Finance, *Tax Expenditure Report*, Fiscal Year 2013. Figure is for Tax Year 2009, the latest available.
Capital Spending		
Economic Development Co.	New York City Economic Development Corporation, *Audited Financial Statements*, Fiscal Year 2002. Figure is based on "Program Costs" line in the Statement of Revenues and Expenses. Access to financial statements made available through the New York City Independent Budget Office.	New York City Economic Development Corporation, *Audited Financial Statements*, Fiscal Year 2012. Figure is based on "Program Costs" line in the Statement of Revenues and Expenses, page 38, http://www.nycedc.com/sites/default/files/filemanager/Compliance/EDC/EDC_-_2012_Financial_Statements.pdf.
Hudson Yards Development Co.	Hudson Yards Development Corporation did not exist in 2002.	Figure includes "Project Spending" for "Subway Extension", "Land Acquisition and Public Amenities" and "Transfers to Hudson Yards Development Corporation" through the Hudson Yards Infrastructure Corporation. Data from "Government Funds Statement of Revenues, Expenditures and Changes in Fund Balances for the Year Ending June 30, 2012," page 21, http://www.nyc.gov/html/hyic/downloads/pdf/hyic_annual_report_12.pdf.
Other Development Corporations	Data for Brooklyn Navy Yard was unavailable for this report. Brooklyn Bridge Park Corporation and the Trust for Governor's Island did not exist in 2002.	Figure uses "City Capital funds" from Fiscal Year 2012 Financial Statements for: Brooklyn Bridge Park Corporation (http://www.brooklynbridgepark.org/media/download/5f0568fd-0e55-4b24-828e-145c2934881c), Brooklyn Navy Yard Development Corporation (http://brooklynnavyyard.org/media/uploads/Financial%20Statements%20Y-E%206-30-2012.pdf) and the Trust for Govenor's Island (http://www.govisland.com/downloads/pdf/tgi_financial_statements_fy2012.pdf).

Operating Programs		
Small Business Services and Economic Development Co.	Data from New York City Comptroller's Office, *Comprehensive Annual Financial Report*, Fiscal Year 2002. Small Business Services (SBS) figure is net of payments to the New York City Economic Development Corporation (EDC) and includes Workforce Investment Act funding for programs serviced by SBS in 2012 but undertaken by the Department of Social Services and the Department of Employment in 2002. Data for EDC from New York City Economic Development Corporation, *Audited Financial Statements*, Fiscal Year 2002. Figure includes office rent, project costs, property rentals and related expenses, personnel, and other general expenses. Contract and other expenses to New York City are excluded.	Data from New York City Comptrollers Office, *Comprehensive Annual Financial Report*, Fiscal Year 2012. SBS figure is net of payments to the EDC. Data for EDC from New York City Economic Development Corporation, *Audited Financial Statements*, Fiscal Year 2012. Figure includes office rent, project costs, property rentals and related expenses, personnel, and other general expenses. Contract and other expenses to New York City are excluded.
Other Development Corporations	Data for Brooklyn Navy Yard and the Business Relocation Assistance Corporation available from the New York City Comptroller's Office, *Comprehensive Annual Financial Report*, Fiscal Year 2002. Data for New York City Industrial Development Agency (IDA) operations from New York City Industrial Development Agency, *Audited Financial Statements*, Fiscal Year 2002, made available through the Independent Budget Office. Brooklyn Bridge Park Corporation and the Trust for Governors Island did not exist in 2002.	Operations expenditure figures available from Audited Financial Statements for Fiscal Year 2012 for Brooklyn Navy Yard Development Corporation, Brooklyn Bridge Park Corporation, Industrial Development Agency, and the Trust for Governors Island.
Conduit Financing		
Total Debt Outstanding	Figure is the sum of Long Term Liabilities and Debt Outstanding in the Fiscal Year 2002 Audited Financial Statements of the New York City Industrial Development Agency (IDA) and the Trust for Cultural Resources (TCR). IDA financials made available from the New York City Independent Budget Office. TCR financials made available from the New York City Economic Development Corporation.	Figure is the sum of Ending Balances from the Schedule of Bonds and Notes Outstanding for Fiscal Year 2012 for the New York City Industrial Development Agency (http://www.nycedc.com/sites/default/files/filemanager/Compliance/IDA/FY2012_Master_Template_Final_-_IDA.pdf), and Build NYC (http://www.nycedc.com/sites/default/files/filemanager/Compliance/BNY/FY2012_Master_Template_Final_-_BNYC.pdf) and Calendar Year 2012 for the Trust for Cultural Resources (http://www.tcrnyc.org/documents/19h%20Schedule%20of%20Bonds%20%20Notes%20Outstanding.pdf).

New Issuance (Annual)	Annual issuances is a CBC calculation based on issue dates in Fiscal Year 2002 in the Schedule of Bonds and Notes Outstanding, FY2012 for the New York City IDA (http://www.nycedc.com/sites/default/files/filemanager/Compliance/IDA/FY2012_Master_Template_Final_-_IDA.pdf) and the CY2012 Schedule of Bonds and Notes Outstanding for the Trust for Cultural Resources (http://www.tcrnyc.org/documents/19h%20Schedule%20of%20Bonds%20%20Notes%20Outstanding.pdf). Build NYC did not exist in 2002.	Annual issuances is a CBC calculation based on issue dates in Fiscal Year 2012 in the Schedule of Bonds and Notes Outstanding, FY2012 for the New York City IDA (http://www.nycedc.com/sites/default/files/filemanager/Compliance/IDA/FY2012_Master_Template_Final_-_IDA.pdf), Build NYC (http://www.nycedc.com/sites/default/files/filemanager/Compliance/BNY/FY2012_Master_Template_Final_-_BNYC.pdf) and the CY2012 Schedule of Bonds and Notes Outstanding for the Trust for Cultural Resources (http://www.tcrnyc.org/documents/19h%20Schedule%20of%20Bonds%20%20Notes%20Outstanding.pdf).

ENDNOTES

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[2] New York City Mayor's Office, *DiverseCity: NYC Economic Diversification Program*, 2009, http://www.nyc.gov/html/econplan/downloads/pdf/diversification_final.pdf.

[3] Citizens Budget Commission, "Competitiveness Scorecard: Assessing New York City's Competeveness as a Home for Human Capital," February 2013, http://www.cbcny.org/content/competitiveness-scorecard-assessing-nycs-competitiveness-home-human-capital.

[4] Calculated based on data from the Bureau of Labor Statistics, Inflation Calculator, 2013, http://www.bls.gov/data/inflation_calculator.htm.

[5] U.S. Census Bureau, *2000 Decennial Census*, 2000 and *American Community Survey*, 2012 one-year estimates, 2013, http://factfinder2.census.gov/.

[6] U.S. Census Bureau, *U.S. Decennial Census*, 2000 and *American Community Survey*, 2012 one-year estimates, 2013, http://factfinder2.census.gov/. Constant (2012) dollars calculated in the Bureau of Labor Statistics Inflation Calculator, http://www.bls.gov/data/inflation_calculator.htm.

[7] Counties include Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Ulster, Westchester in New York State; Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union and Warren in New Jersey; Carbon, Lehigh, Monroe, Northampton, and Pike in Pennsylvania; and Fairfield, Litchfield and New Haven in Connecticut. U.S. Census Bureau, "Current Statistical Area Lists and Definition," February 2013, http://www.census.gov/population/metro/data/def.html. Population available through the *American Community Survey*, 2012 one-year estimates.

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[9] National Center for Educational Statistics, "District Profiles," 2013, http://nces.ed.gov/nationsreportcard/districts/.

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[11] New York City Independent Budget Office, *Taxing Metropolis: Tax Effort and Tax Capacity in U.S. Cities*, 2000, http://www.ibo.nyc.ny.us/iboreports/taxcapacity222.pdf.

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[14] See Citizens Budget Commission, "Avoiding Past Mistakes: Principles for Governing Regional Economic Development Councils," September 2011; Citizens Budget Commission, "Overhauling the New York Power

Authority's Economic Development Programs," September 2009.

[15] New York City Department of Small Business Services, *Help for Neighborhoods: Business Improvement Districts, 2013*, http://www.nyc.gov/html/sbs/html/neighborhood/bid.shtml.

[16] The CPC consist of a Chair serving at the pleasure of the mayor, six additional mayoral appointees, five members appointed one each by the borough presidents, and one member appointed by the Public Advocate.

[17] The contract between New York City and EDC allows the organization to "perform various services primarily related to the retention and expansion of industrial and commercial development" which may include facilitation of industrial and commercial projects, stabilizing and improvement of industrial areas, administration of public loans, subsidies and grants, and managing City property. New York City Economic Development Corporation, *Certified Financial Audit*, 2012, http://www.nycedc.com/sites/default/files/filemanager/Compliance/EDC/EDC_-_2012_Financial_Statements.pdf.

[18] Build NYC figures in this paper include spending and debt issued by the New York City Capital Resource Corporation, which was merged with BUILD NYC on April 1, 2013.

[19] New York City Department of Finance, *Annual Report on Tax Expenditures for Fiscal Year 2012*, February 2012, http://www.nyc.gov/html/dof/downloads/pdf/12pdf/ter_2012_final.pdf.

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[22] New York City Economic Development Corporation, *The New York City Real Property Industrial and Commercial Incentive Program (ICIP): Description and Analysis*, September 2008, http://taxadmin.org/fta/meet/08rev_est/papers/brindisi2.pdf.

[23] New York City Independent Budget Office, *With Changes to Commercial Property Tax Program, Breaks Will Not be as Costly for the City*, August 2008, http://www.ibo.nyc.ny.us/iboreports/ICIP2008.pdf.

[24] New York City Economic Development Corporation, *The New York City Real Property Industrial and Commercial Incentive Program (ICIP): Description and Analysis*, September 2008, http://taxadmin.org/fta/meet/08rev_est/papers/brindisi2.pdf

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[27] New York City Department of Finance, *Annual Report on Tax Expenditures for Fiscal Year 2012*, February 2012, http://www.nyc.gov/html/dof/downloads/pdf/12pdf/ter_2012_final.pdf

[28] Insurance Carriers and related activities employed approximately 56,200 and 53,900 in 2002 and 2010, respectively. New York State Department of Labor, "NYC Current Employment Statistics," 2013, http://labor.ny.gov/stats/nyc/index.shtm.

[29] Air transportation and support activities employed approximately 31,900 in 2002 and 2010. New York State Department of Labor, "NYC Current Employment Statistics," 2013, http://labor.ny.gov/stats/nyc/index.shtm.

[30] For a compilation of these reports, see Center on Budget Policy Priorities, "State Film Subsidies: Not Much Bang for Too Many Bucks," 2010, http://www.cbpp.org/cms/?fa=view&id=3326.

[31] New York City Department of Finance, *Annual Report on Tax Expenditures for Fiscal Year 2012*, February 2012, http://www.nyc.gov/html/dof/downloads/pdf/12pdf/ter_2012_final.pdf.

[32] New York City Department of Finance, Annual Report on Tax Expenditures for Fiscal Year 2013, March 2013, http://www.nyc.gov/html/dof/downloads/pdf/13pdf/ter_2013_final.pdf.

[33] For projects beginning in fiscal year 2006 or later, the discount rate is 6.25 percent; for all other projects, the discount rate is 7.75 percent. The report shows the costs and benefits of projects using the discount rate in effect for the year the project was approved.

[34] Hudson Yards Infrastructure Corporation, *Annual Report*, 2012, http://www.nyc.gov/html/hyic/downloads/pdf/hyic_annual_report_12.pdf.

[35] Financials for the Brooklyn Navy Yard Development Corporation were not available for fiscal year 2002. City of New York documents from fiscal year 2002 show that no capital appropriations were made for the development corporation in fiscal year 2002.

[36] Data retrieved for zip code "10474." U.S. Census Bureau, "County Business Patterns," 2012, http://www.census.gov/econ/cbp/.

[37] Data retrieved for zip code "11201." U.S. Census Bureau, "County Business Patterns," 2012, http://www.census.gov/econ/cbp/.

[38] Build NYC figure includes New York City Capital Resource Corporation debt issued; the two entities were fully merged on April 1, 2013.

[39] New York City Independent Budget Office, *Operator of the Yankee Stadium Parking System Strikes Out: With Bonds in Default and Growing Debt to the City, Company Issued Request for Proposals to Redevelop Two Lots*, July 2013, http://ibo.nyc.ny.us/cgi-park/?p=707.

[40] Michael E. Porter, "Location, Competition, and Economic Development: Local Clusters in a Global Economy", *Economic Development Quarterly*, vol. 14(1), February 2000: 15-34.

[41] Data for 2002 are from New York City Mayor's Office of Operations, *The Mayors Management Report for Fiscal Year 2006*, http://www.nyc.gov/html/ops/downloads/pdf/mmr/0906_mmr.pdf. Data for 2012 from New York City Mayor's Office of Operations, *The Mayors Management Report for Fiscal Year 2012*, http://www.nyc.gov/html/ops/downloads/pdf/mmr0912/0912_mmr.pdf.

[42] This estimate is based on an average 5 percent interest rate and an average municipal income tax rate of 4 percent.

[43] Professional, scientific and technical service establishments grew from 22 in 2000 to 70 in 2011 in zip code 11205, approximating the Brooklyn Navy Yard; establishments grew from 50 in 2000 to 93 in 2011 in zip code 11220, approximating the area around Bush Terminal. Data available from U.S. Census Bureau, "County Business Patterns," 2013, http://www.census.gov/econ/cbp/index.html.

[44] Citizens Budget Commission, "Planning After PLANYC: A Framework for Developing New York City's Next Ten-Year Capital Strategy," December 2013.